Sapido

One for all

11AC Wireless Router

AC 750Mbps Dual-Band Wireless Router

BR261c

Networking

User Manual v1.0.0

FCC Caution

FCC Part 15.19 Caution:

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
  - this device may not cause harmful interference and
  - this device must accept any interference received, including interference that may cause undesired operation
- This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.
- Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

IMPORTANT NOTE:

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The antennas used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter.

FCC Statement in User's Manual (for calss B)

FCC Section 15.105

"Federal Communications Commission (FCC) Statement"

This equipment has been tested and found to comply with the limits for a lass B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CE Statement of Conformity

Our product has been tested in typical configuration by Ecom Sertech Corp and was found to comply with the essential requirement of “Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility” (89/336/EEC; 92/31/EEC; 93/68/EEC)

Chapter 1.Introduction

The BR261c Wireless Dual Band Router supports IEEE 802.11ac ,providing high-throughput wireless local area networks on the 5GHz band ,and integrates 4-port Switch, 1 port USB and Wireless AP. The BR261c are external with two 2.4G antennas and one dual band antenna to delivers exceptional range and speed, which can fully meet the need of Small Office/Home Office (SOHO) networks and the users demanding higher networking performance. Your wireless connections are radio band selectable to avoid interference in your area.

Chapter 2. Main Features

Many connecting way

BR261c provides many Internet connecting way. Shares data and internet access for users ,supporting Dynamic IP/Static IP/PPPOE Internet access ,802.11n Wi-Fi、3.5G、PPTP/L2TP,Smartphone、 LTE for user to choose.

Rigorous Security mechanism

BR261c provides WEP/WPA/WPA2/WPA-Mixed authentication,TKIP/AES encryprtion Security, Firewall to make sure that the data of user in network are protected securely.

Easy to configure and manage

With convenient Web-based UI, user can configure easily and browse system information and status. BR261c can detect 3.5G system and connect to Internet automatically. If user changes Internet-connecting way to Ethernet, BR261c will detect it and connect Internet automatically.

One Touch Encrypted Wireless connection

BR261c has entity WPS button to make wireless connecting more easy. All user should do is just One Touch.

USB File Sharing

BR261c supports two USB 2.0 port to connect external hard disk or flash driver. User can easily share files through the built-in Samba/FTP Server functionality.

USB port also can support devices as below:

- Support 3.5G and LTE USB dongle
- Support Smart Phone
- Support USB Storage、 USB HDD
- Support USB Webcam

Green AP Power-saving function

When Wireless and CPU are full loading, the output power of wireless and CPU will reach maximum. When Wireless and CPU are standby, system will decrease the output power of wireless and CPU. System will enable this function automatically without any setup by user.

This function will decrease the temperature and enlarge the battery life.

IEEE 802.3az supported

First, it detects link status, allowing each port on the switch to power down into a standby or ‘sleep’ mode when a connected device, such as a computer, is not active. Second, it detects cable length and adjusts the power accordingly.

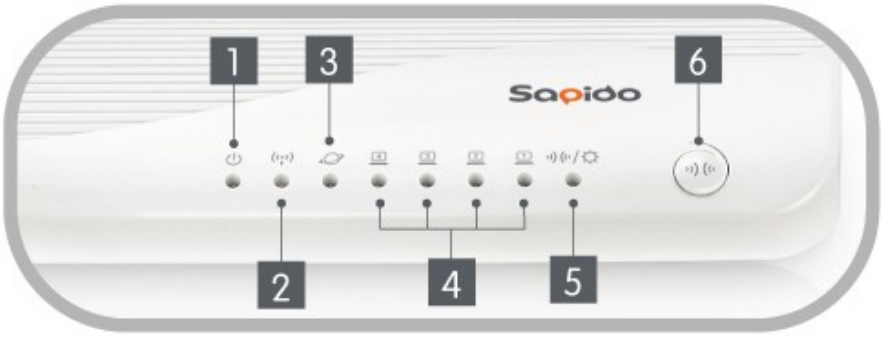
Dual Band mode supported

BR261C dual-band router support are 2.4GHz and 5Gz , It allow you to choose where to best connect you devices at home or in the office to ensure stability .It is recommended to select the 2.4 GHz if you will be using computers to access the Internet for simple browsing and email. These applications do not take too much bandwidth and work fine at a greater distance.

The 5 GHz band has a shorter range compared to a 2.4 GHz band because in radio frequencies, the higher the frequency the shorter its range. In other words, if you are using a lower frequency like the 2.4 GHz, the distance it will cover will be greater than the 5 GHz band.

Chapter 3. Panel Layout

3.1The Front Panel



NO.	LED	Function	Color	Status	Description
1	Power *1	Power indication	Green	On	Power is being applied to this product
2	2.4GHz/5Ghz	2.4GHz/5Ghz activity	Yellow	On	2.4GHz Enable
				Off	2.4GHz Disable
				Blinking30ms	Data is transmitting or receiving
			blue	On	5GHz Enable
				Off	5GHz Disable
				Blinking30ms	Data is transmitting or receiving
3	WAN	WAN	Green	On	10/100 Mbps Ethernet is connected

		port activity		Blinking30ms	100 Mbps Ethernet Tx/Rx activity
				Blinking120ms	10 Mbps Ethernet Tx/Rx activity
4	LAN*4	LAN port activity	Green	On	10/100 Mbps Ethernet is connected
				Blinking30ms	100 Mbps Ethernet Tx/Rx activity
				Blinking120ms	10 Mbps Ethernet Tx/Rx activity
5	WPS LED Status	WPS/System status	Green	On	System is ready to work
				Blinking120ms	Reset/Firmware upgrade in progress WPS function in progress WPS function is progress
6	WPS Button				Press the button to enable WPS function

3.2 The Real Panel

The following parts are located on the rear panel (View from left to right).

(7)POWER: The Power socket is where you will connect the power adapter.

(8)Reset: Pressing this button for more than 5 seconds for default reset BR261c.

(9)USB Port: Connect to the USB Device,ex:USB disk or 3.5G dongle

(10)Power Switch:Switch it to power On/Off the BR261c

(11)1,2,3,4 (LAN): These ports (1, 2, 3, 4) connect the Router to the PC or Ethernet

(12)WAN: This WAN port is where you will connect the DSL/cable Modem, or Ethernet

(13)Wireless antenna: To receive and transmit the wireless data.(right and left side are 2.4GHz, and the middle is 5GHz)

Chapter 4.Connecting the Router

1.Power On the BR261c,waiting for 30 seconds

2.PC connect to the one of LAN port of BR261c by RJ-45 cable

3.ADSL or upper Router connect to WAN port of BR261c

4.Open the pc's browser(ex:IE) and key-in 192.168.1.1 in address bar, if connection is fine,you can connect to BR261c and show the login page. Please key in the account and password,the Default Value is "admin"

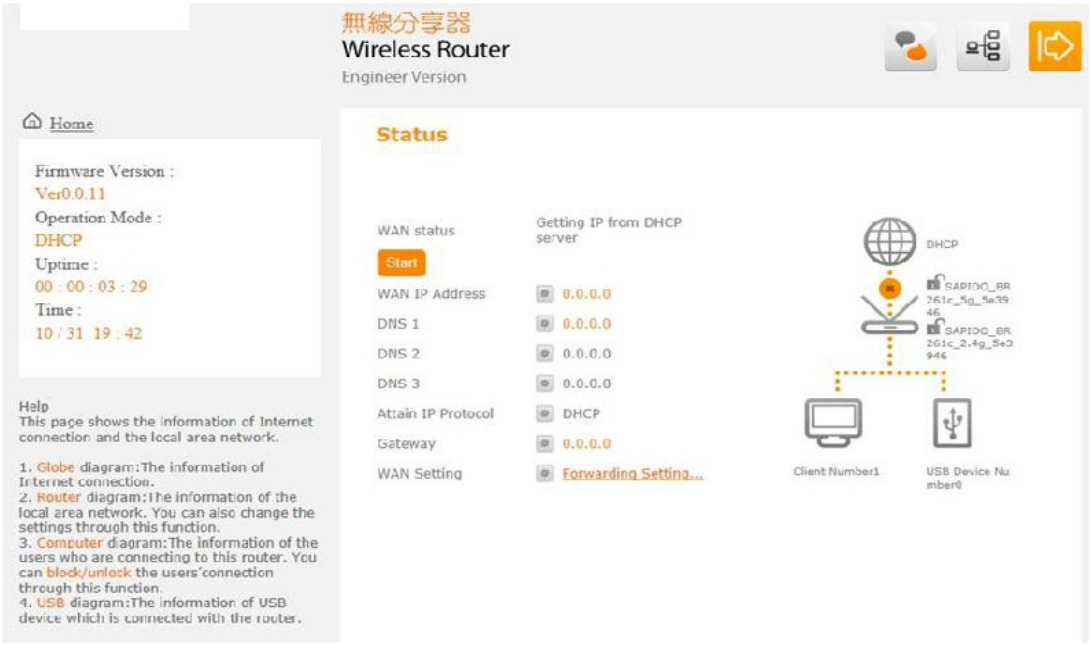
•Users can change password for accessing the web management interface in this section.

•Input New Password, then input confirm password again.

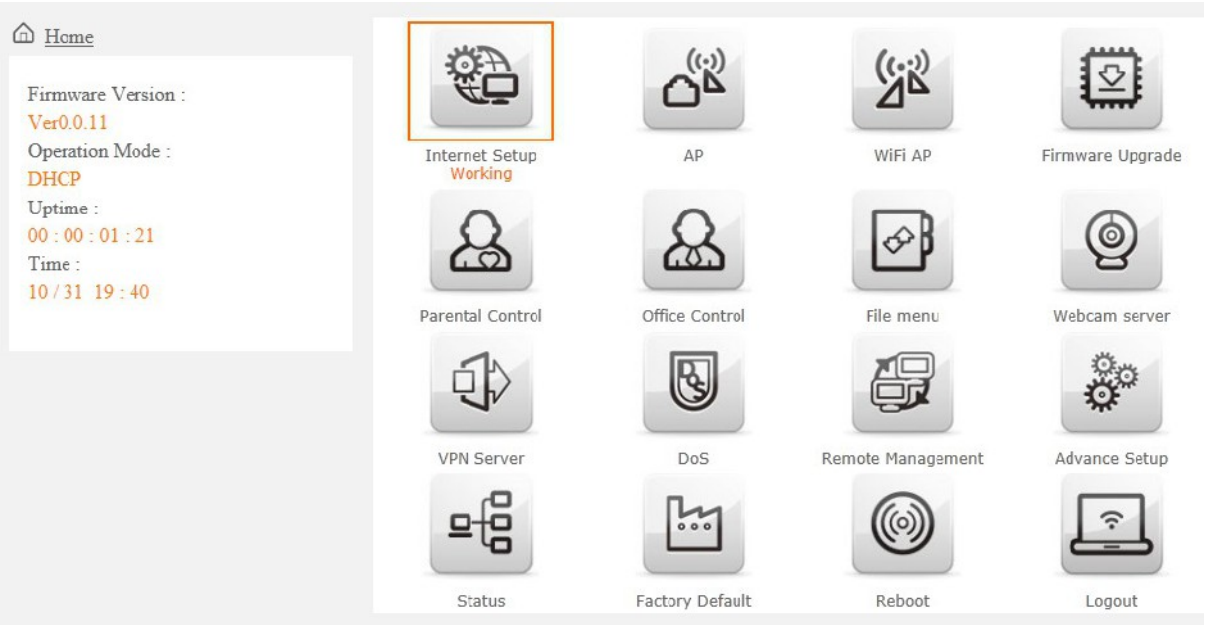
Chapter 5.Configuring the Router

5.1 Home Page

After login in BR261c,Home page is showed first as below.User can know the firmware version、WAN type、Connection status、SSID、connected USB device、Client Number. It help you understand the current status of BR261c quickly



And when user press the “HOME”.All configure is showed .User can configure those setting according requests.



Item	Description
Internet Setup	There are several different method to access Internet,PPPoE.DHCP.Static.IP.PPTP.L2TP.WiFi ISP.3.5G.smart phone.LTE
AP	If a router is already set at the house, and you want to make the wireless LAN communication
WiFi AP	When you connect to the internet wirelessly through PC and wireless device without wireless LAN function equipped.
Firmware Upgrade	This function allows you upgrade the BR260c firmware to new version. Please note do not power off the device during the upload because it may crash the system.
Parental control	You can use URL filter 、MAC Filter Schedule and Wireless Schedule to limit access Internet.
Office Control	For office environment，there are Multiple AP、Wireless Access Control、IP Filtering、IP Binding and QoS

File Menu	There are Samba Storage and FTP server features
Webcam server	For image record (AVI JPEG)
VPN Server	PPTP/L2TP general setup introduction.
DoS	Denial of Service
Remote management	This page allow you to access the GUI on WAN.
Advance Setup	Advance setting menu
Status	You could check WAN, LAN, Client network in status.
Factory Default	You could reset the current configuration to factory default.
Reboot	This function is used to reboot
Logout	This page is used to logout.

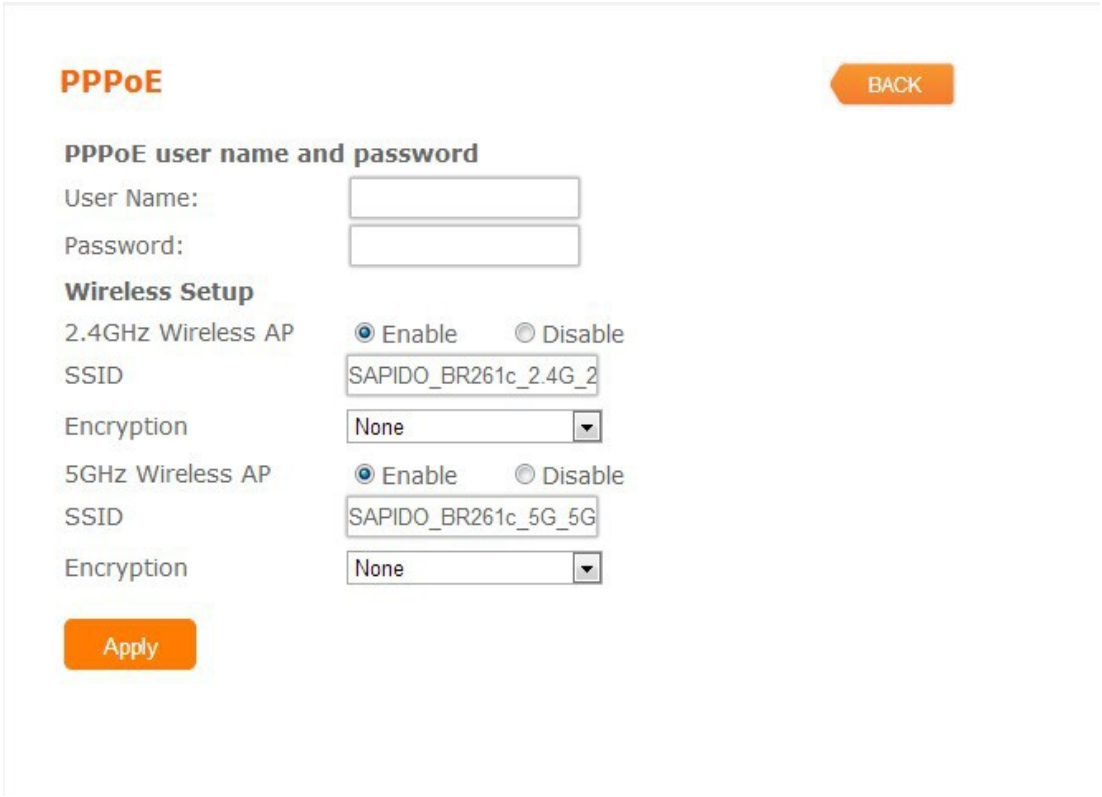
5.2 WAN Type Setting

The Section will guide you how to connect the BR261C to internet,Click Internet

Setup icon to enter WAN setup as below. The Internet Setup is depended on the service that you contract with the provider.The BR261c provides nine selections for the Internet Mode type, PPPoE, DHCP, Static IP , PPTP and L2TP 、WiFi ISP 、3.5G 、Smart Phone 、LTE. Check with your ISP if you don’t know the WAN type.

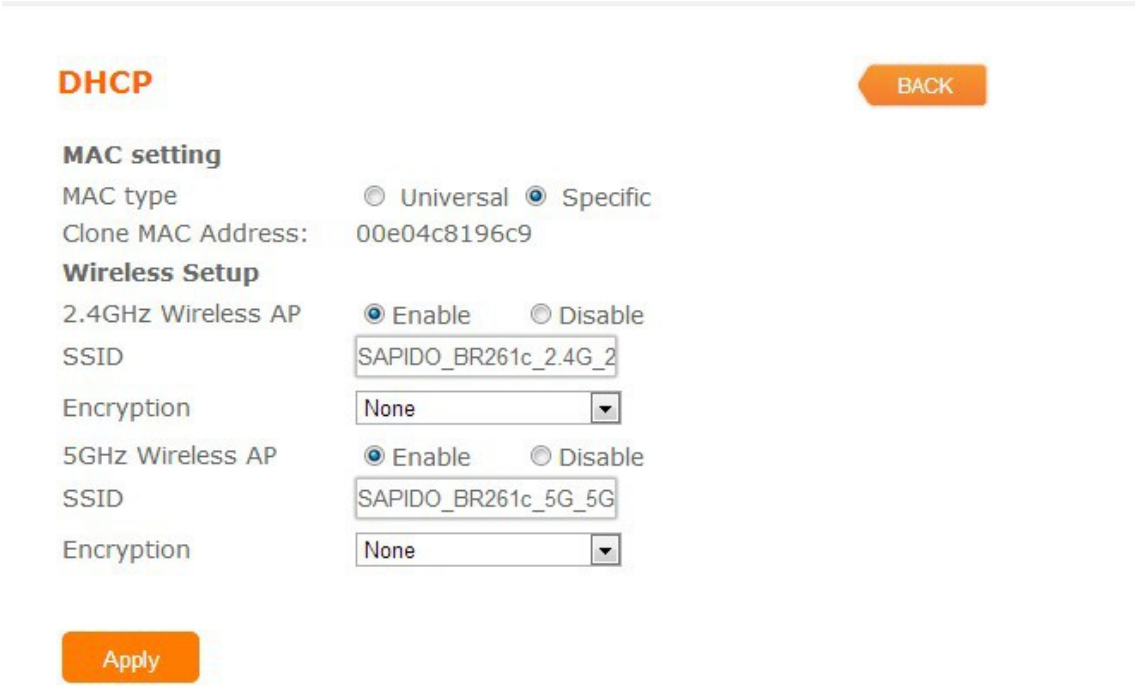
5.3 PPPoE

If your ISP provides a PPPoE connection,Select PPPoE option, And you should enter the "User name" and "Password"



5.4 DHCP

If your ISP provides the DHCP service, please choose DHCP type ,and the BR261c will automatically get IP parameters form your ISP or other Router



Item	Description
MAC type	Select "Universal" or "Specific" Universal : clone controller PC mac address as BR261c WAN mac address Specific : use BR261c itself mac address
Wireless AP	Turn on/off wireless
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

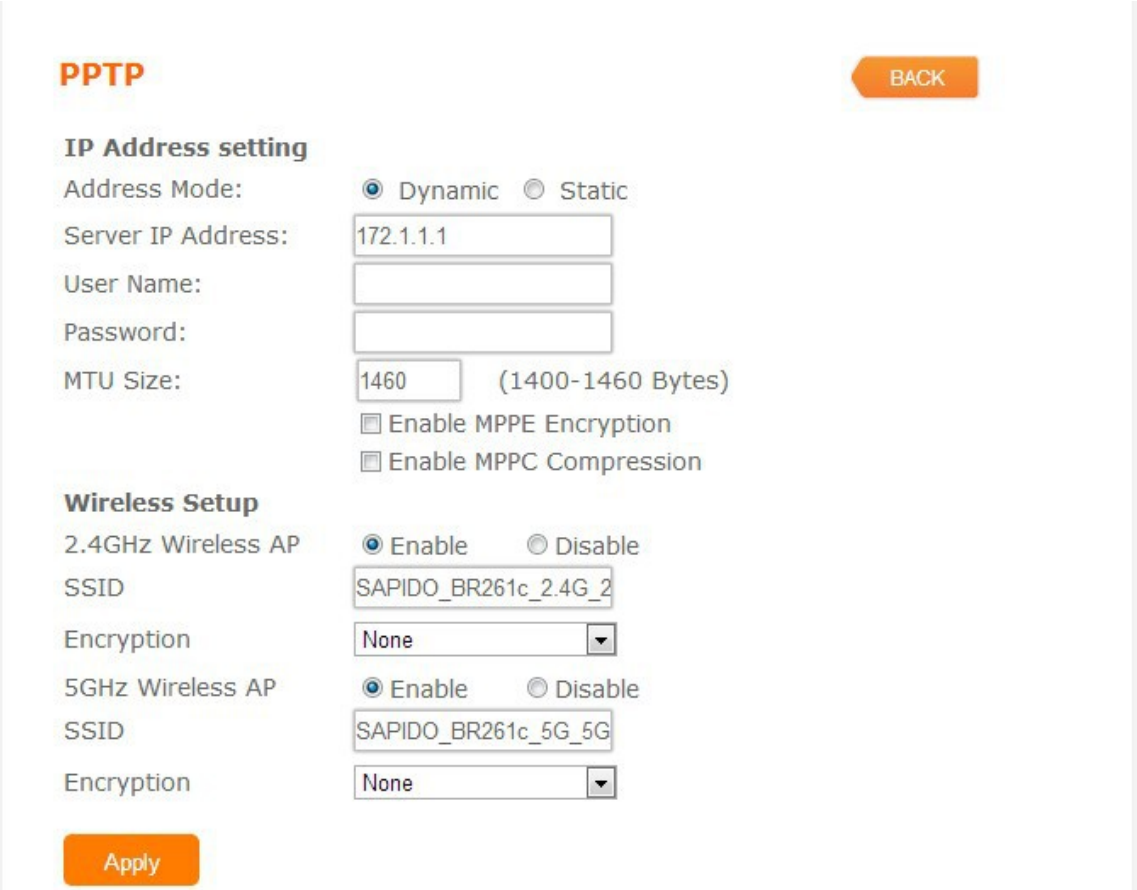
5.5 Static IP

If your ISP provides a static or fixed IP address ,Subnet Mask, Gateway and DNS setting,select Static IP.

Item	Description
IP Address	Enter the IP address which is provided by your ISP.
Subnet Mask	Please enter the Subnet Mask address
Gateway	Input ISP Default Gateway Address.
DNS	Input DNS information which is provided by your ISP
Wireless AP	Turn on/off wireless
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

5.6 PPTP

If your ISP provides PPTP connection, please select PPTP option and you should enter PPTP Server IP Address、User Name、Password



Item	Description
Address Mode	Select "Dynamic" or "Static"
Server IP Address	Input your server IP address provided by your ISP. If you don't know, please check with your ISP.
User Name	Input PPTP account provided by your ISP.
Password	Input the password provided by your ISP.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
Enable MPPE Encryption	Microsoft Point-to-Point Encryption (MPPE) provides data security for the PPTP connection that is between the VPN client and VPN server.
Enable MPPC Compression	Microsoft Point-to-Point Compression (MPPC) is a scheme used to compress Point-to-Point Protocol (PPP) packets between Cisco and Microsoft client devices. The MPPC algorithm is designed to optimize bandwidth utilization in order to support multiple simultaneous connections. The MPPC algorithm uses a Lempel-Ziv (LZ) based algorithm with a continuous history buffer, called a dictionar

Wireless AP	Turn on/off wireless
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

5.7 L2TP

If your ISP provides L2TP connection, please select PPTP option and you should enter L2TP Server IP Address 、User Name 、Password

Item	Description
Address Mode	Select "Dynamic" or "Static"
Server IP Address	Input your server IP address provided by your ISP. If you don't know, please check with your ISP.
User Name	Input L2TP account provided by your ISP.
Password	Input the password provided by your ISP.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
Wireless AP	Turn on/off wireless
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

5.8 WiFi ISP

BR261c WAN get IP address from other wireless AP and LAN/Wireless LAN client get IP from BR261c

5.9 3.5G

BR261c also supports 3.5G to be a wan type.User plugs the 3.5G USB dongle in USB port and set the SIM pin code, press "Apply" to finish the setting. It will dail up to the 3.5G network.

Item	Description
Mode	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Network Traffic Monitor	BR261c will record 3.5G traffic usage volume
Limit Internet Traffic	User can limit 3.5G traffic usage volume to prevent over budget
Connection Speed	Provide 3 kinds of speed，auto is recommended
SIM PIN	SIM card PIN number
Authentication	Provide 3 kinds of authentication methods，auto is recommended
Wireless AP	Turn on/ off wireless function
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

5.10 Smart phone

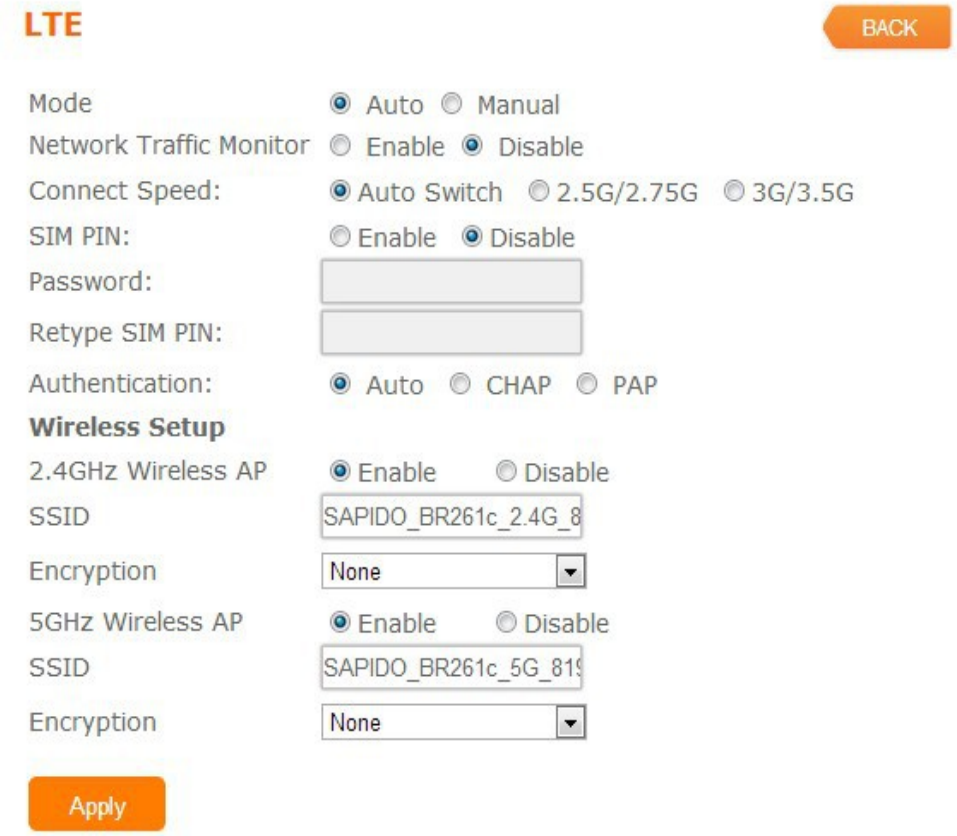
User also plug-in the smart phone to be a wan type.BR261c supports almost smart phone in the market

Item	Description
Service	BR261c support 4 kinds of smart phone、Nokia、Black Berry、Sansung、iPhone and Andriod phone **iPhone and Andriod phone do not need to do any setting , all you need is to turn on hotspot function and connect it to USB port**
Region	Select correct phone service region
ISP	Select correct phone service ISP
APN	Please check smart phone ISP to get APN data
User Name	Please check smart phone ISP to get user name
Password	Please check smart phone ISP to get password
Phone number	Please check smart phone ISP to number data
Authentication	Provide 3 kinds of authentication methods，auto is

	recommended
Wireless AP	Turn on/ off wireless function
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

5.11 LTE

The LTE service is not ready as now in Taiwan.



Item	Description
Mode	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Network Traffic Monitor	BR261c will record LTE traffic usage volume
Limit Internet Traffic	User can limit LTE traffic usage volume to prevent over budget
Connection Speed	Provide 3 kinds of speed，auto is recommended
SIM PIN	SIM card PIN number
Authentication	Provide 3 kinds of authentication methods，auto is recommended
Wireless AP	Turn on/ off wireless function

SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.

Note:

If you don't know how to choose the appropriate connection type, The BR261c also support the auto Detect function as default,you can plug-in the cable of wan connect to wan port, the Router to automatically search your Internet connection for servers and protocols. The connection type will be reported when an active Internet service is successfully detected by the Router. This report is for your reference only. To make sure the connection type your ISP provides,please refer to the ISP. The various types of Internet connections that the Router can detect are as follows:

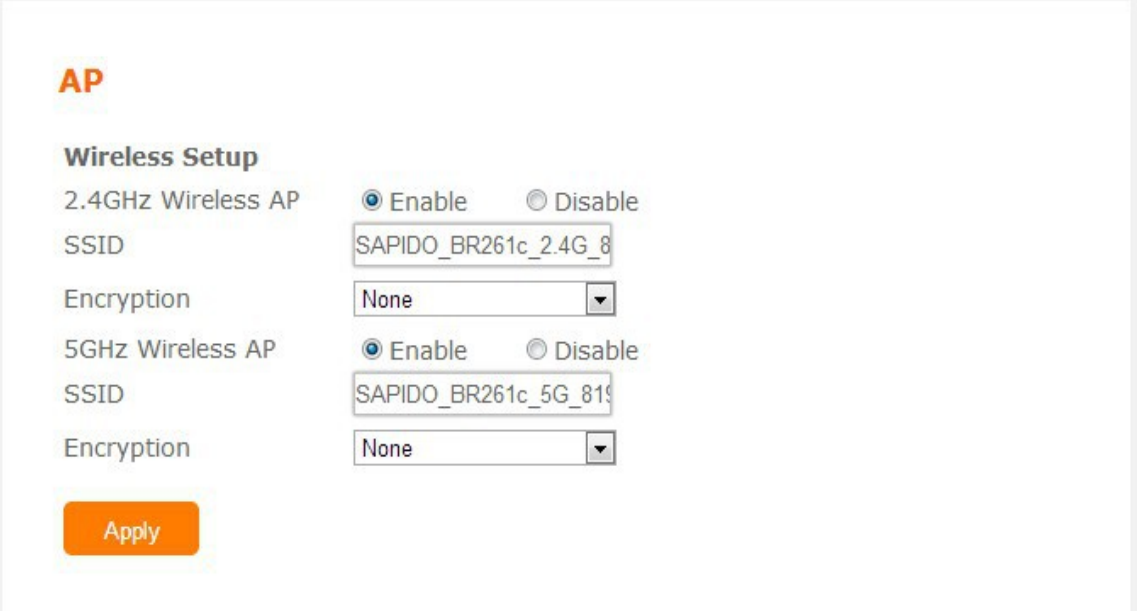
- PPPoE - Connections which use PPPoE that requires a user name and password.
- Dynamic IP - Connections which use dynamic IP address assignment.
- Static IP - Connections which use static IP address assignment.
- 3.5G Dongle- Plugin the 3.5G dongle to USB port, Connections which use 3.5G

that requires a password, Default password is null.

• Smart phone- Plugin the iphone to USB port and open the "personal Hotspot" function in iphone.BR261c will auto share the internet connection with iphone.

5.12 AP

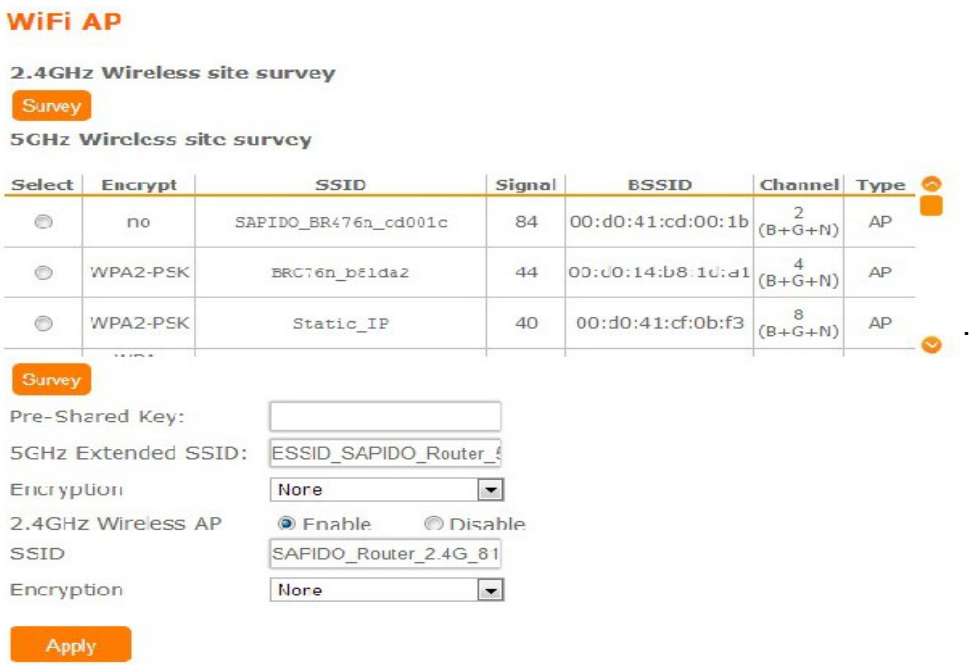
If user has the other router is already set but need to extend more LAN ports in the environment.user also want to make the wireless LAN communication. He can switch the mode to AP mode. In the mode, all clients get IP from upper side(other Router) device,BR261c don't assign the IP to client.so this mode does not support WAN、DHCP、NAT、DDNS、QoS、Firewall、Static/Dynamic route、VPN Server features

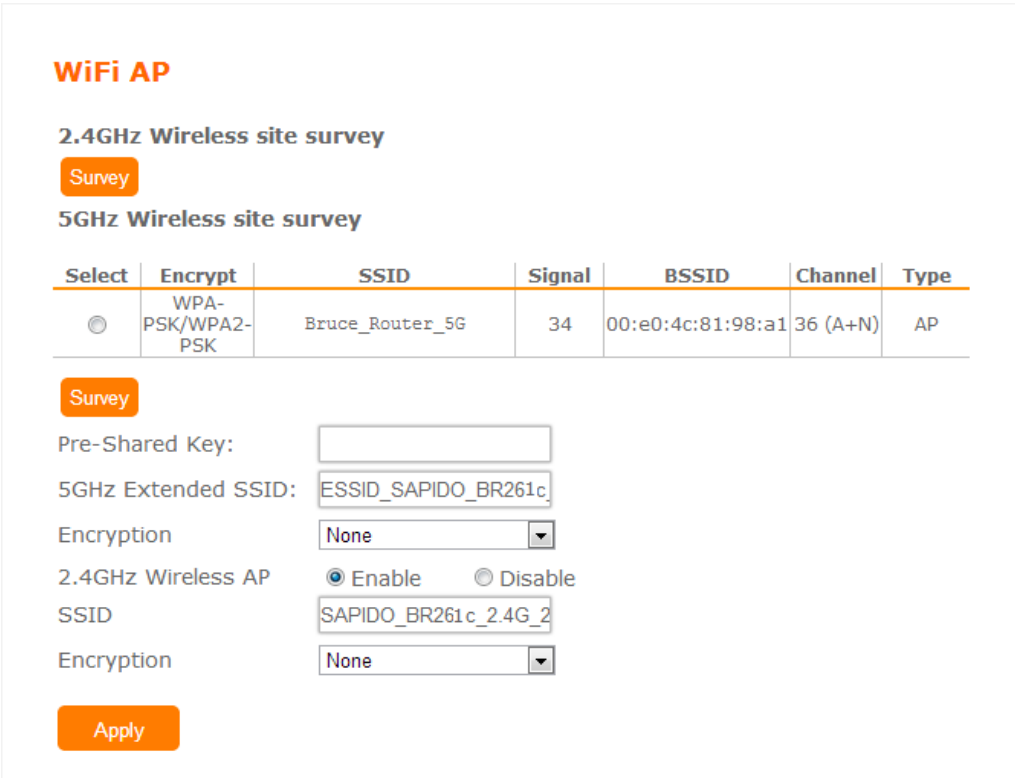


Item	Description
Wireless AP	Turn on/off wireless
SSID	Service Set identifier, users can define to any or keep as default.
Encryption	Select wireless encryption type form the drop-down list.
Wireless AP	Turn on/off wireless

5.13 WiFi AP

If user don't connect wan port via wire cable in your enviroment, User can also choose WiFi AP mode which connect to a upper router via wireless communication. In the mode, all clients get IP from upper side(other Router) device,BR261c don't assign the IP to client.so this mode does not support WAN、DHCP、NAT、DDNS、QoS、Firewall、Static/Dynamic route、VPN Server features .BR261c supports dual band mode in wireless communicaton, User can choose any band according his request.





Item	Description
Survey	List all available 2.4G or 5G wireless AP
Pre-Shared Key	Input the wireless AP key which you want to connect
Extend SSID	Provide SSID for wireless client which want to connect to BR261c
Encryption	Select wireless encryption type form the drop-down list.

5.14 Firmware Upgrade

This function can upgrade the firmware of the router. There are two methods for user upgrade firmware: Auto upgrade and Manual upgrade.

Caution: To prevent that firmware upgrading is interrupted by other wireless signals and causes failure. We recommend users to use wired connection during upgrading.

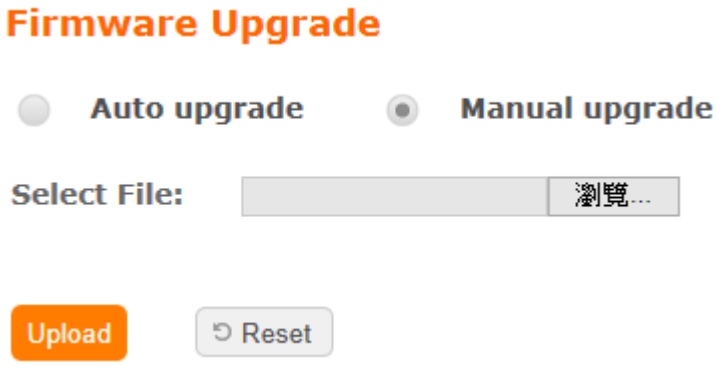
Note: The firmware upgrade will not remove your previous settings.

5.14.1 Auto upgrade

It provides auto detect new firmware from Internet, and user can select to upgrade new version or not.

5.14.2 Manual upgrade

If you download firmware from website, you can upgrade firmware manual .



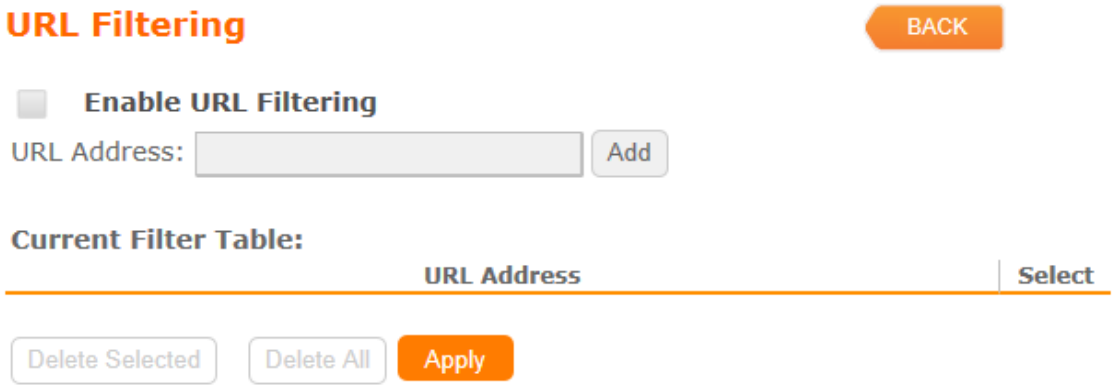
5.15 Parental Control

Parental Control provide URL Filtering and MAC Filter Schedule

And scheduled the access time of wireless signal for setup.

5.15.1 URL Filtering

URL Filtering is used to restrict users to access specific websites in internet

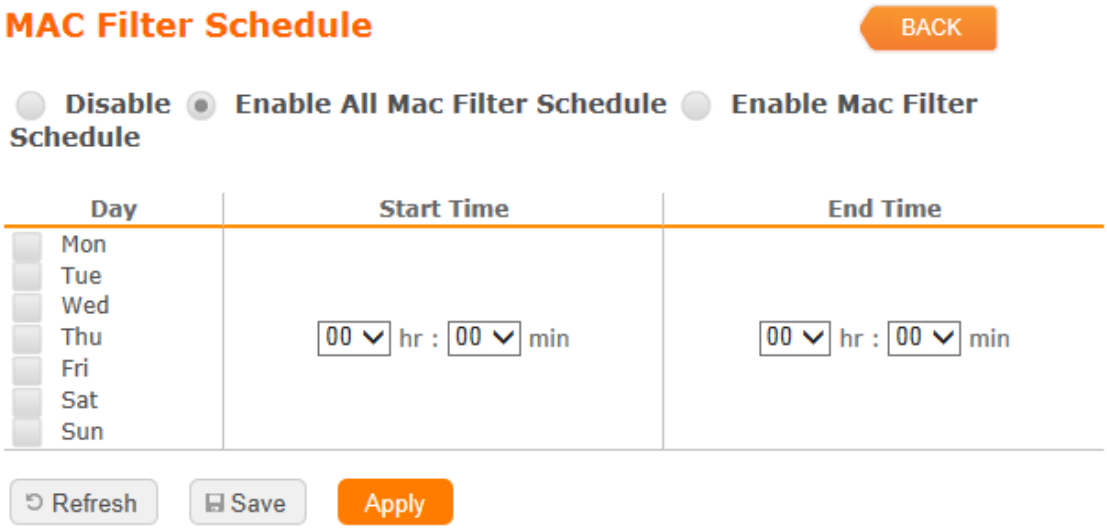


Item	Description
Enable URL Filtering	Please select Enable MAC Filtering to filter MAC addresses
URL Address	Please enter the MAC address that needs to be filtered.
Apply	Click on Apply to save the setting data.
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

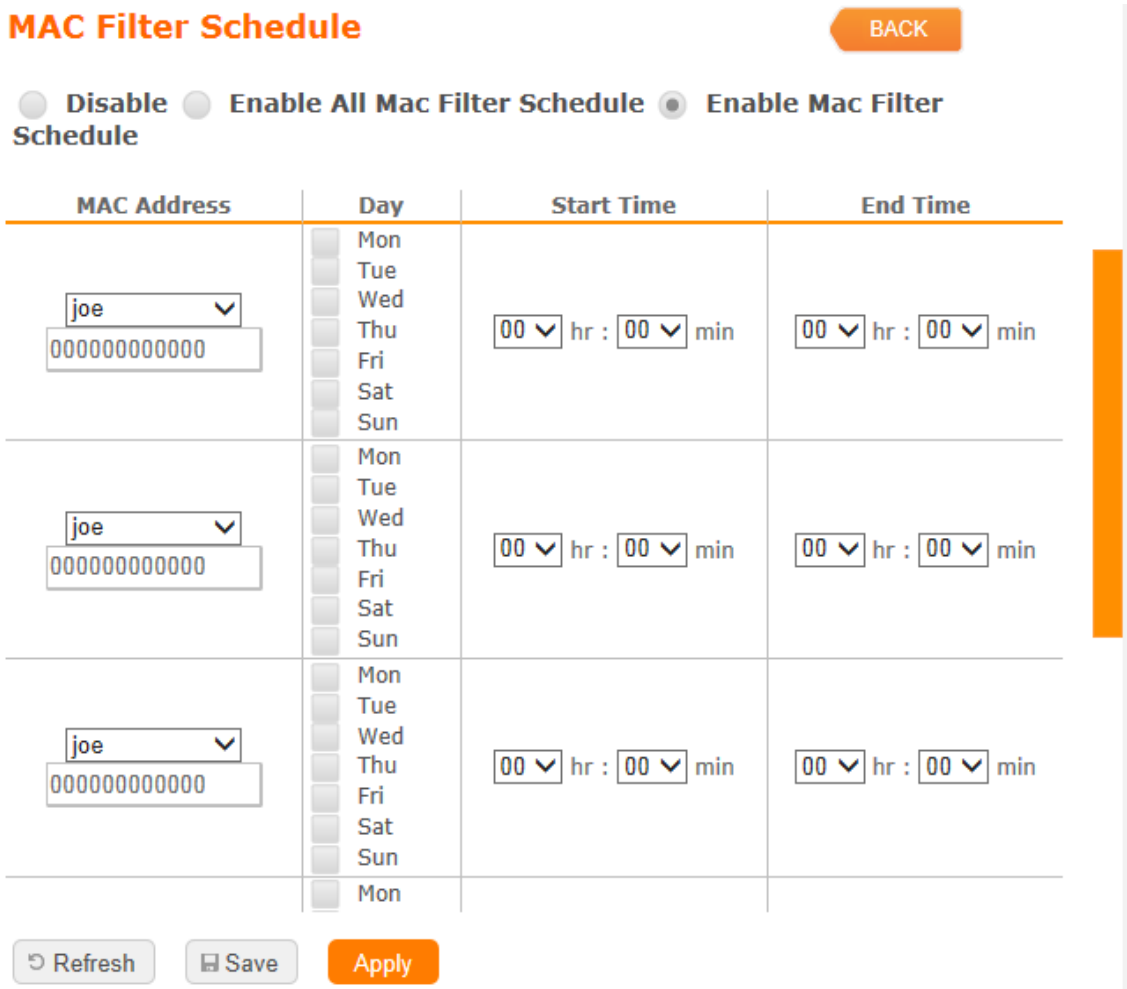
Notes: This function will not be in effect when the Virtual Server is enabled. Please disable Virtual Server before activate the URL Filtering function.

5.15.2 MAC Filter Schedule

When enabled, filtering will be based on the MAC address of LAN device(computers and cell phone). Any device with its MAC address on this list will be blocked from accessing the Internet.



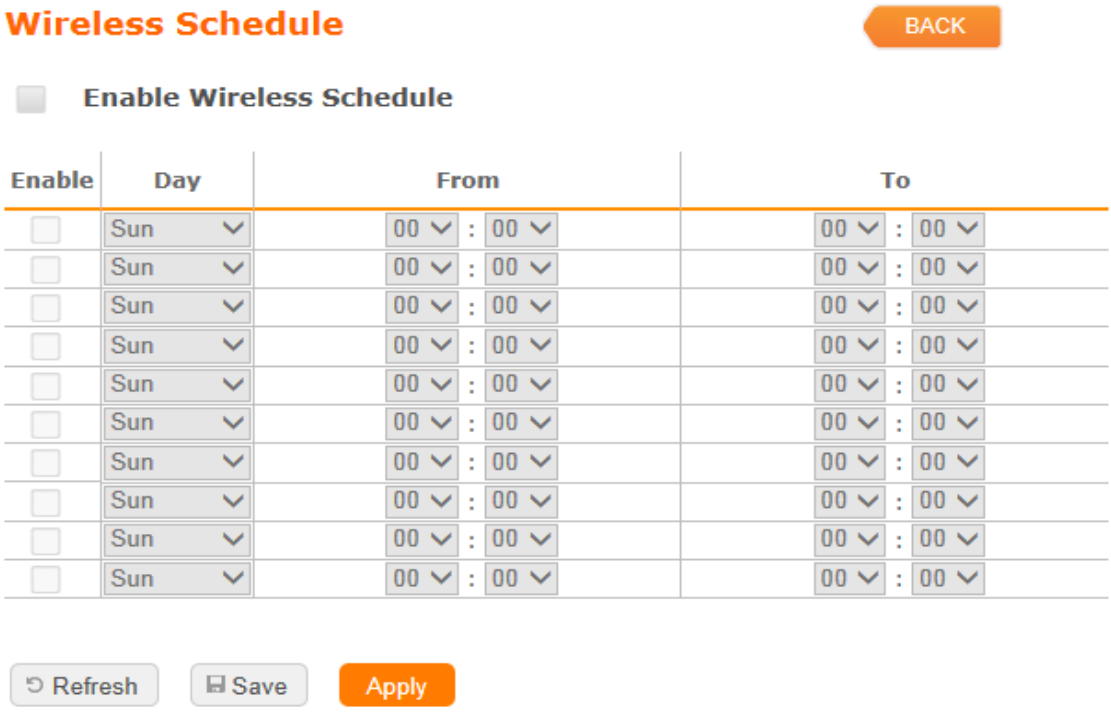
User can set the schedule with "Disable" or "Enable one rule for all devices at the time" or "For specific device"



Disable	Disable the MAC Filter function
Enable all Mac Filter schedule	Enable one rule for all devices at the time
Enable Mac Filter schedule	Enable rules for specific device
Apply	Click on Apply to save the setting data.
Save	Save the setting
Refresh	Clear all configure before save the setting

5.15.3 Wireless Schedule

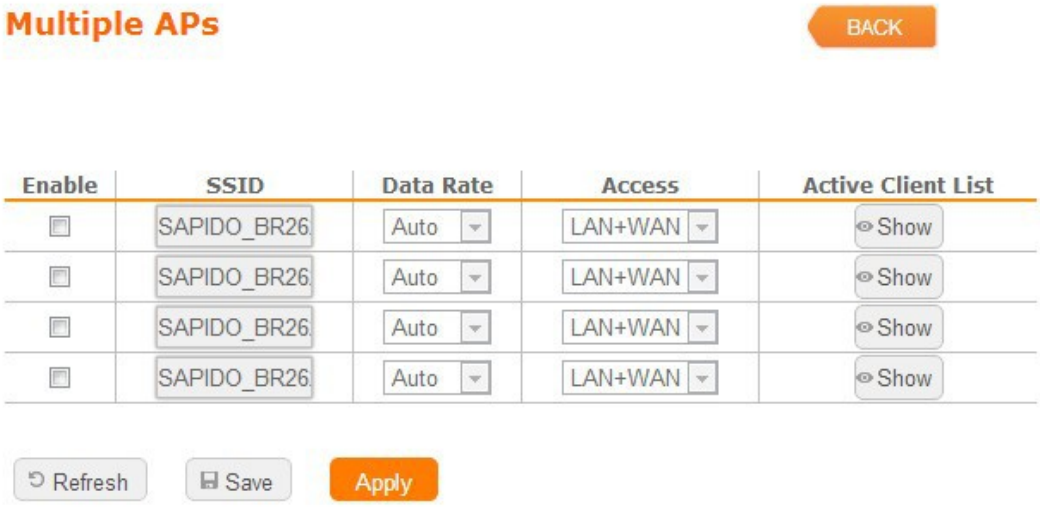
Wireless available schedule, this page allows you setup the wireless schedule rule for device. Please do not forget to configure systeim before enable this feature User will don't find BR261c in wireless range if the schedule time is out of the range.



5.16 Office Control

Office control provide Multiple AP、Wireless Access Control、IP Filtering、IP Binding、QoS

5.16.1 Multiple AP

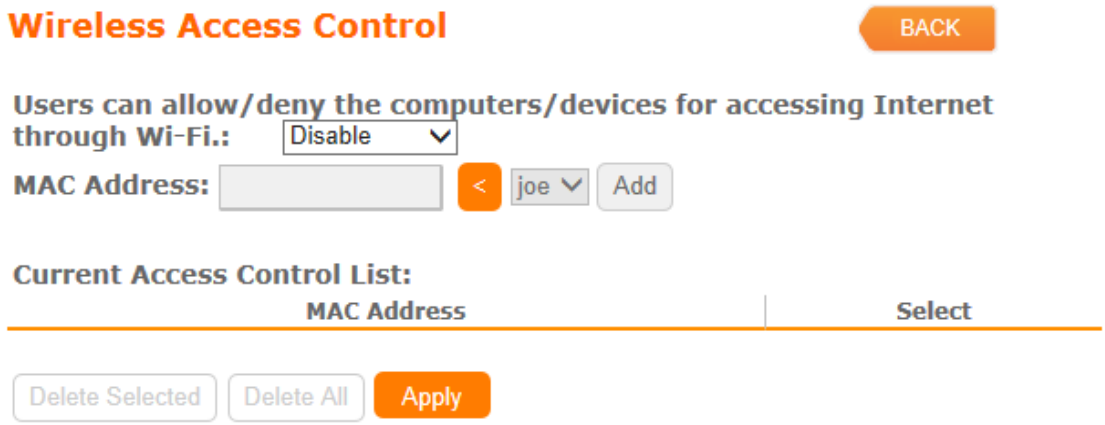


The BR261c can register up to 4 SSIDs (wireless LAN group). It can be used as if there are multiple wireless LAN access points with one product.

Item	Description
Enable	Enable or disable the service.
SSID	Enter the SSID
Data Rate	Select the data transmission rate.
Access	Enable this function can let clients use two access types: a. LAN+WAN: the client can access to the Internet and access in the router's GUI. b. WAN: the client can only access to the Internet.
Active Client List	Display the properties of the client which is connecting successfully.

5.16.2 Wireless Access Control

Access Control allows user to block or allow wireless clients to access this router. Users can select the access control mode, then add a new MAC address with a simple comment and click on “Apply Change” to save the new addition. To delete a MAC address, select its corresponding checkbox under the Select column and click on “Delete Selected” button.



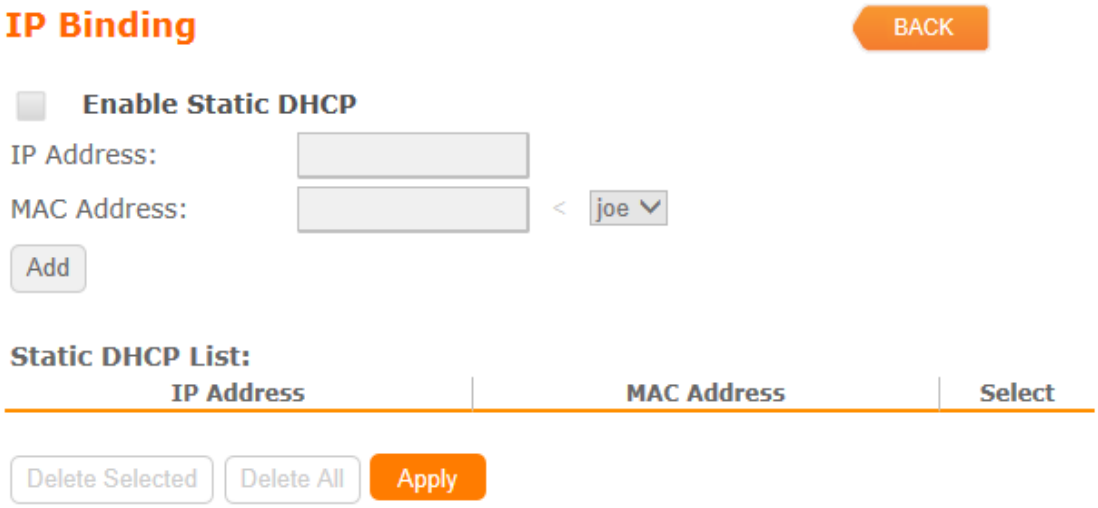
5.16.3 IP Filtering

When enabled, LAN clients are blocked / filtered from accessing the Internet based on their IP addresses

Item	Description
Enable IP Filtering	Please select Enable IP Filtering to filter IP addresses.
Local IP Address	Please enter the IP address that needs to be filtered.
Protocol	Please select the protocol type of the IP address
Apply	Click on Apply to add the setting data
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

5.16.4 IP Binding

This function allows you reserve IP addresses, and assign the same IP address to the network device with the specified MAC address any time it requests an IP address. This is almost the same as when a device has a static IP address except that the device must still request an IP address from the DHCP server.

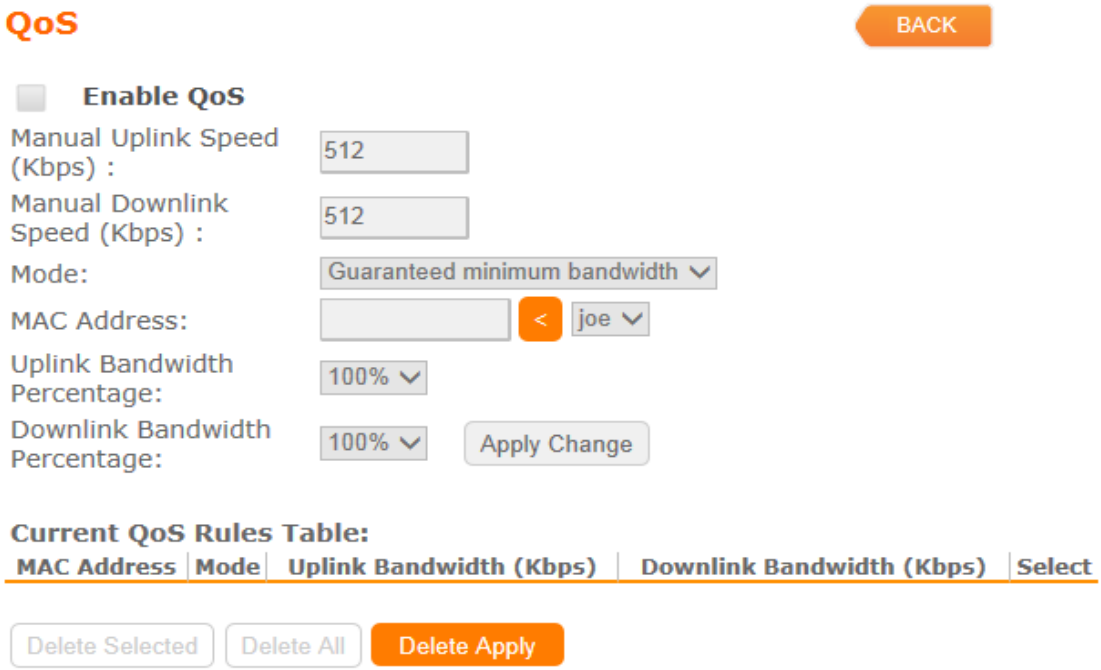


Item	Description
Enable Static DHCP	Select enable to use Static DHCP function
IP Address	Please enter IP address to limit
MAC address	Please enter MAC address to limit
Static DHCP List	It will display all IP and MAC address you made.
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

5.17QoS

QoS acts as a “bandwidth manager” to ensure that those programs that are sensitive to lag are given as much bandwidth as possible to avoid lag. This feature makes an impression immensely when users are streaming video or music and especially when playing online games where lag often means “Game Over”.

To assign priority for each type of application and reserve bandwidth can let you have a better experience in using critical real time services like Internet phone, video conference …etc.



Item	Description
Enable QoS	Check “Enable QoS” to enable QoS function for the WAN port. You also can uncheck “Enable QoS” to disable QoS function for the WAN port.
Manual Uplink Speed	Set the uplink speed by manual to assign the download or upload bandwidth by the unit of Kbps.
Manual Downlink Speed	Set the downlink speed by manual to assign the download or upload bandwidth by the unit of Kbps.
Mode	Select Guaranteed minimum bandwidth or Restricted maximum bandwidth
MAC Address	Set MAC Address if the address type is by MAC Address
Uplink Bandwidth Percentage	LAN device bandwidth of uplink bandwidth User choose different percentage to decide the bandwidth of each client. All percentage of clients must be 100%
Download Bandwidth Percentage	LAN device bandwidth of downlink bandwidth User choose different percentage to decide the bandwidth of each client.All percentage of clients must be 100%
Add	Add the setting data
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

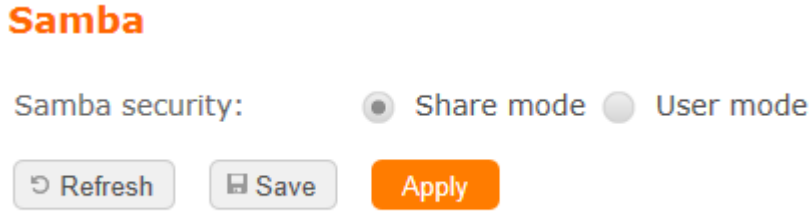
5.18 File Menu

Only support one USB disk for Samba and FTP

Samba supports the file access via USB disk in local LAN

FTP service provides a file server via USB disk for internet access

5.18.1 Samba Storage

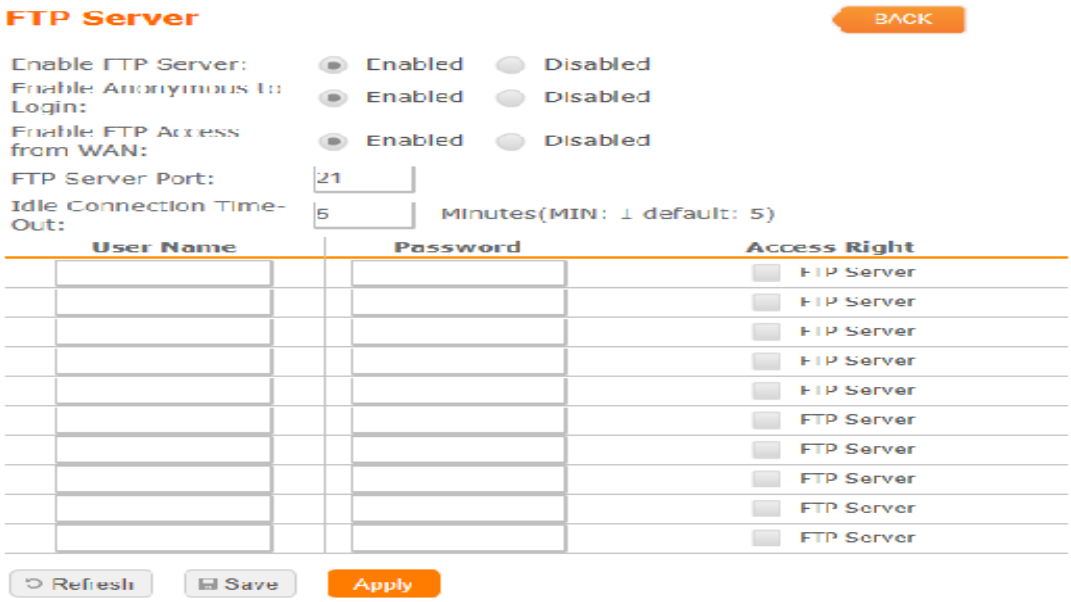


Item	Description
Share mode	User can access USB disk without account and password
User mode	User need account to access USB disk（login account is “admin”，password is “admin”）.

5.18.2 FTP Server

FTP(File Transfer Protocol) is a standard internet protocol for transmitting files between computer(ftp server and ftp client) on the internet

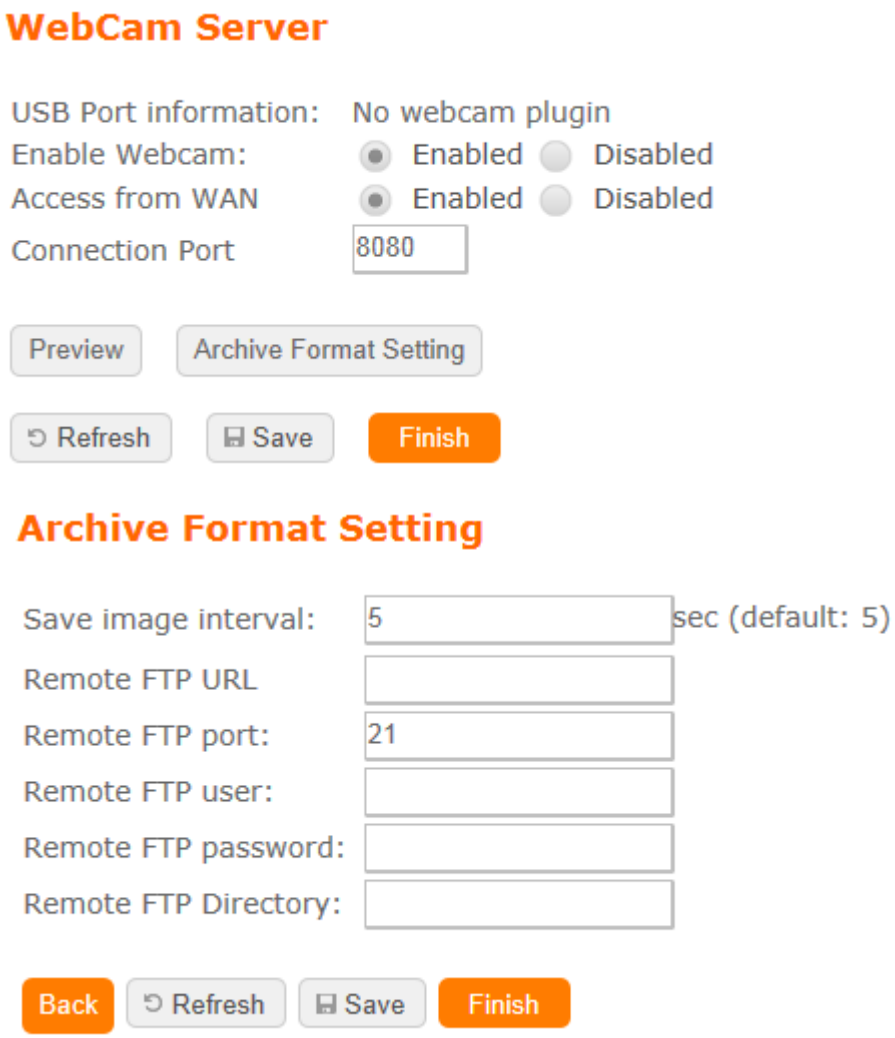
BR261c supports total 10 accounts for FTP server serices, User need to plug-in USB disk or HD disk with BR261c for user to access files through internet.



Item	Description
Enable FTP Server	FTP server start or stop
Enable Anonymous to Login	Agree anonymous account login to FTP server
Enable FTP Access from WAN	Allow user access device FTP server from WAN side（internet）
FTP Server Port	Default FTP server port is 21
Idle Connection Time-Out	FTP process should have an idle timeout, which will terminate the process and close the control connection if the server is inactive (i.e., no command or data transfer in progress) for a long period of time
User Name	Add FTP user account
Password	Add a set of password
Access Right	Enable the option for using

5.19 Webcam Server

The USB port of BR261c also supports the webcam ,It can previews and recordes the pictures.If user want to record the pricture, a saved folder is need.It can assign a USB disk or remote FTP server to save the recorded pictures. Webcam server only support one webcam

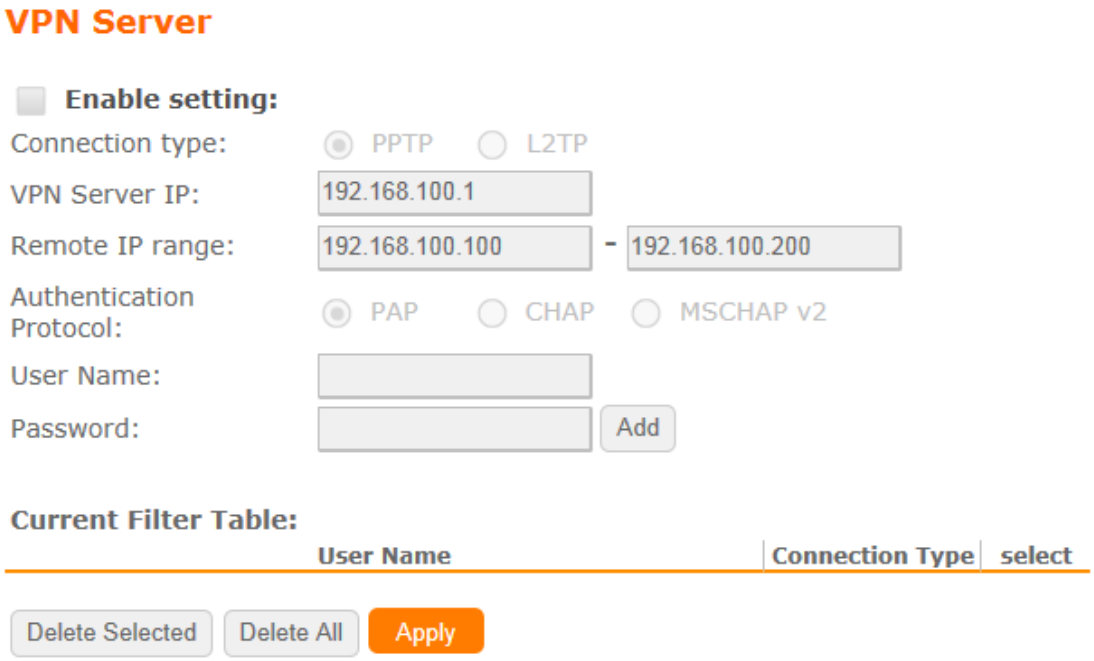


Item	Description
USB Port Information	Detect webcam whether is pluged or not
Enable Webcam	Webcam start or stop
Access from WAN	Allow user to see webcam image from WAN side（internet）
Connection Port	Define webcam access port，default is 8080
Preview	See webcam image
Archive Format Setting	Set remote FTP server information for recording webcam

	image

5.20 VPN Server

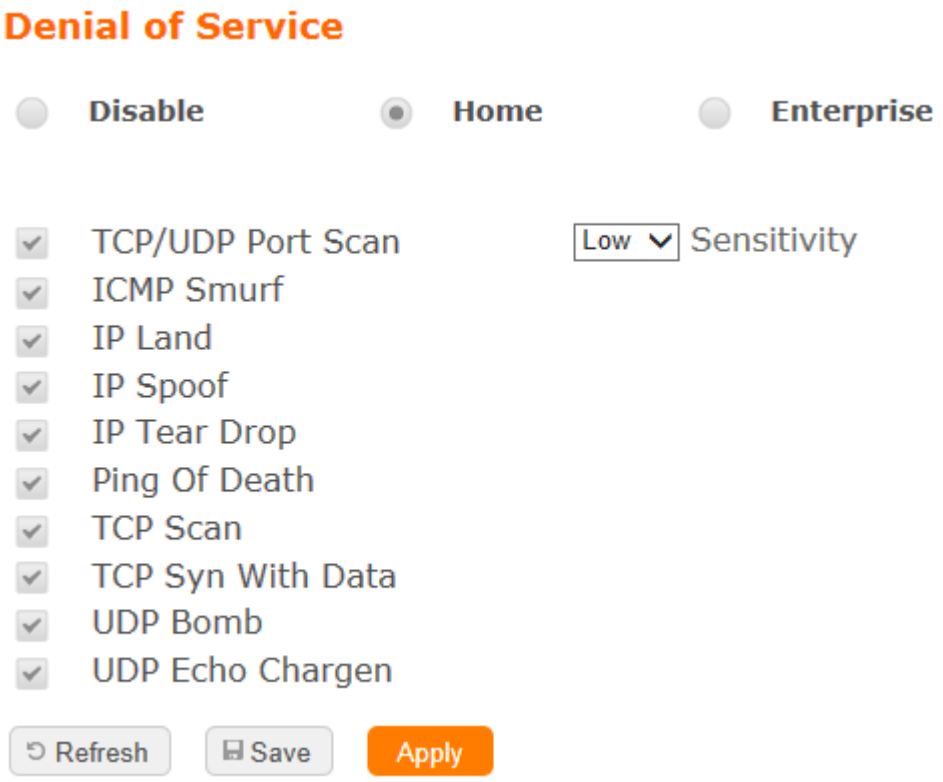
The VPN Server function providing PPTP/L2TP mode are designed to allow users to an external network device / computer and office local area network to establish a secure network connection. And User can safe login office local area network and access to personal documents, files Sharing and other resources. It provides the most convenient VPN encryption.



Item	Description
Enable Setting	Check this option, will start the VPN Server feature.
Connection Type	Provide PPTP or L2TP access connection type.
VPN Server IP	Input the IP address of VPN server
Remote IP range	It is the IP range of assigned to the VPN Client
Authentication Protocol	It is provided three types of authentication protocol
MPPE Encryption Mode (RC4)	It is provided three encryption modes
User Name	Input the login name of the client user
Password	Input the login password of the client user
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

5.21 DoS

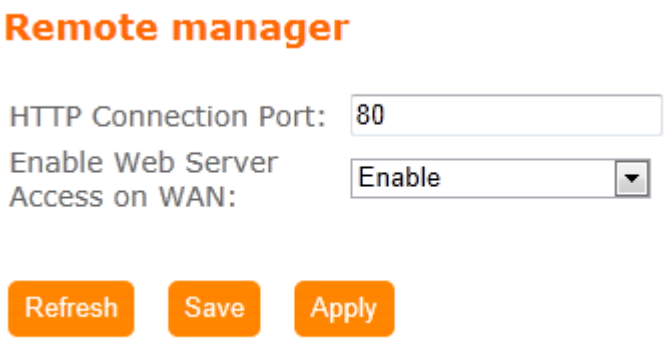
DoS (Denial of Service) is a protection mechamism . Select the Disable or Home or Enterprise to ask BR261c provides protection of different level .Enterprise level can provides the highest level protection but it maybe affect the router's proformace more.



Item	Description
Disable	Disable the DoS function.no any protection in the router
Home	Check “Home” to enable DoS function for prevention. You also can check “No Prevention” to disable DoS function.
Enterprise	Check “Enterprise” to enable DoS function for prevention. You also can check “No Prevention” to disable DoS function.

5.22 Remote Management

This page allows you to set which port can access the router's GUI on WAN or disable it to avoid any connect on WAN.

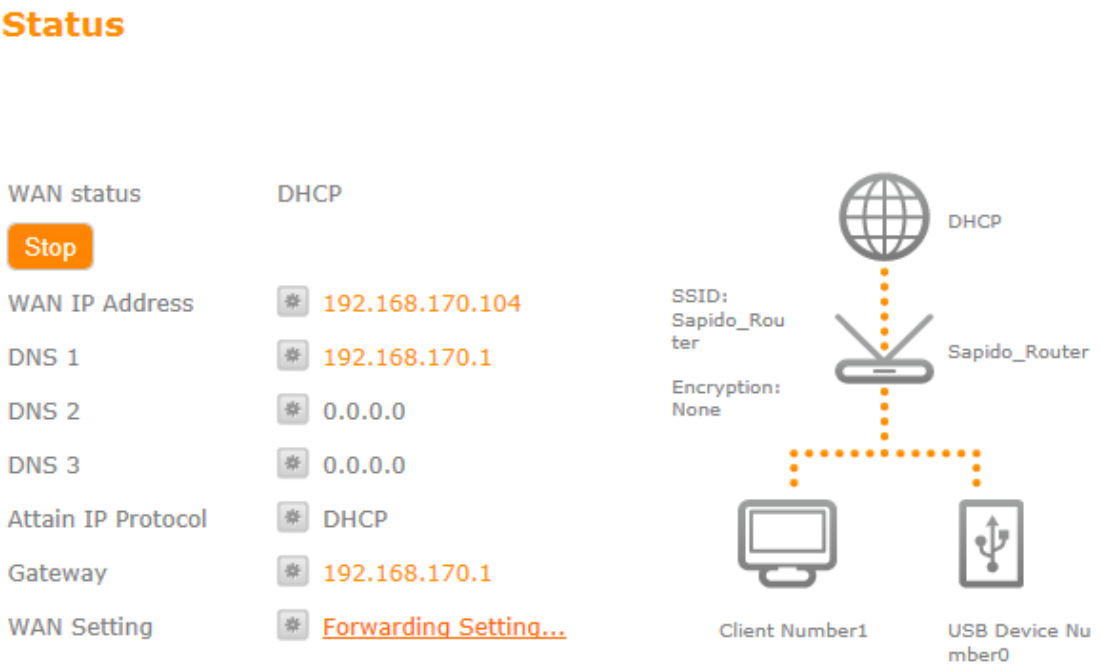


Item	Description
HTTP Connection Port	Users can access GUI by this port，default is 80 If the port is changed,The URL address is also changed ,For example,the http port is set 5000， the login URL address must be “192.168.1.1:5000”
Enable Web Server Access on WAN	Allow user access GUI from WAN side

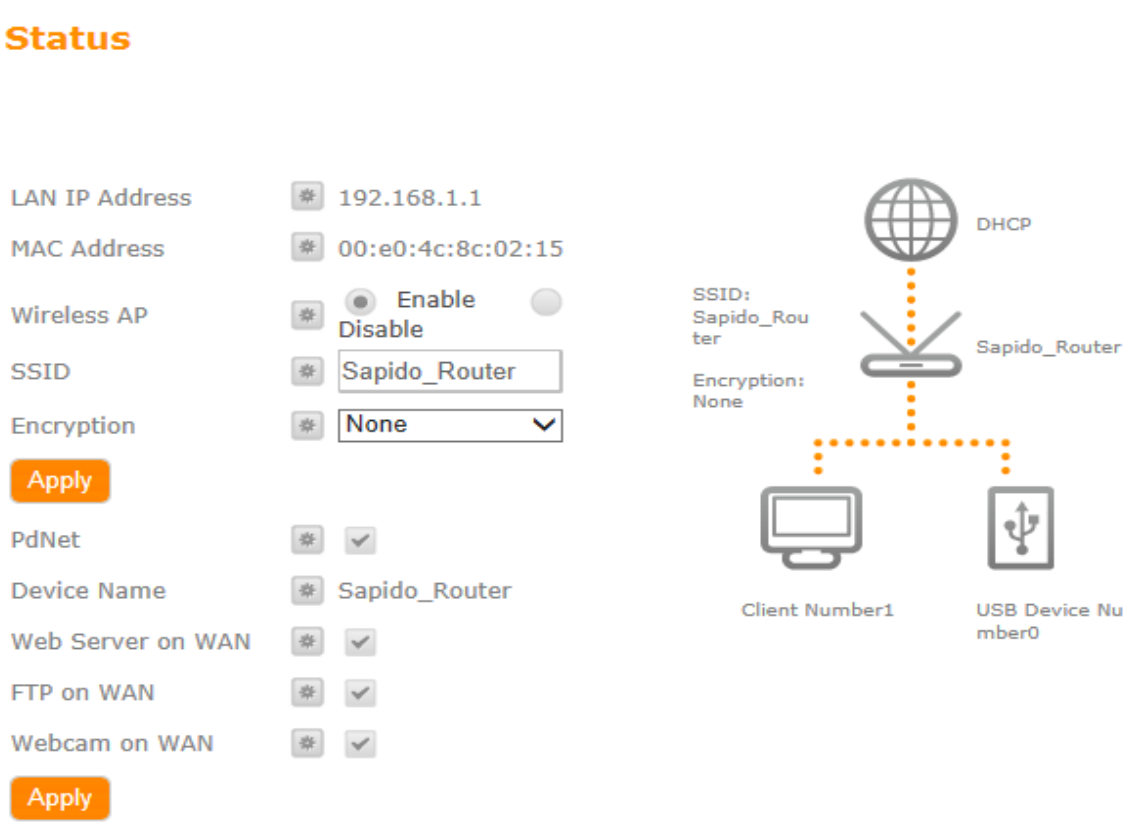
5.23 Status

If user want knows the current status of router, including which WAN type is avaliable, how many clients is connected and how many USB device is plugin BR261c

- **WAN status and configuration**



- **LAN status and configuration**



- **Client status and configuration**

Status

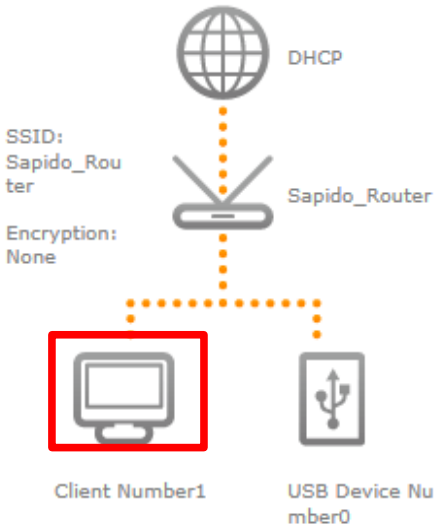
Allow or block client to access internet

Client List

IP address	Host name	Blockade
192.168.1.100	James-PC	

Blockade List

IP address	Host name	Unlock

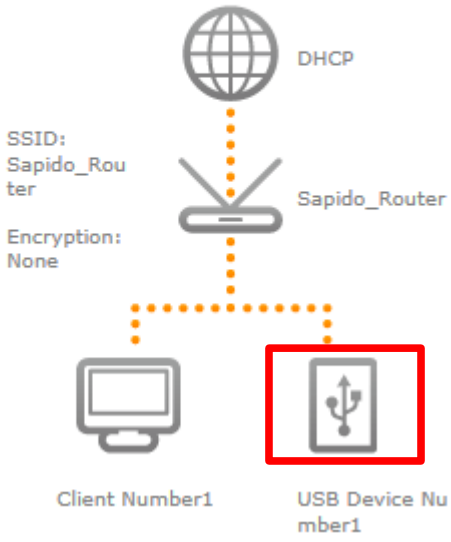


- **USB status and configuration**

Status

USB devices 1

Type	Storage
Partition	sda1
Free Size	0 MB
Total Size	0 MB
AirStorage Setup	Go...



5.24 Factory Default

Reset the current configuration to factory default.

5.25 Reboot

Reboot the router

5.26 Logout

Exit the router

5.27 Advance Setup

The almost function can be set in general function block.Advance setup is more detail setting for advance user.

Internet Mode

5.27.1 Internet Setup

Please refer Internet Setup

AP

Please refer AP mode

WiFi AP

Please refer WiFi AP mode

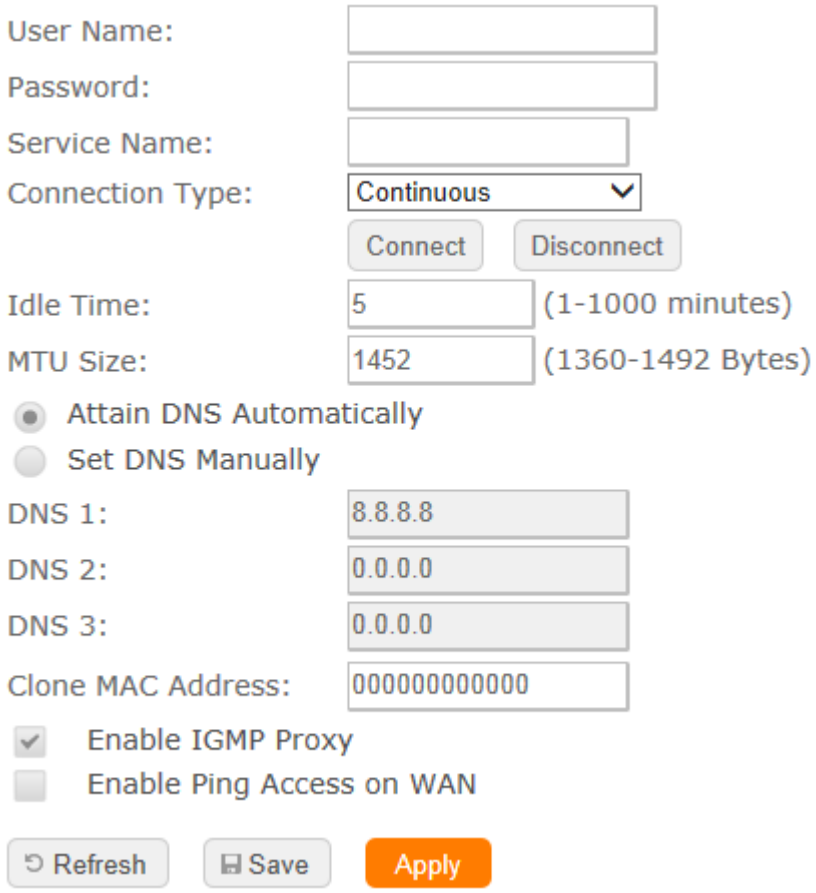
WiFi ISP

Please refer WiFi ISP mode

5.27.2 IP Config

WAN

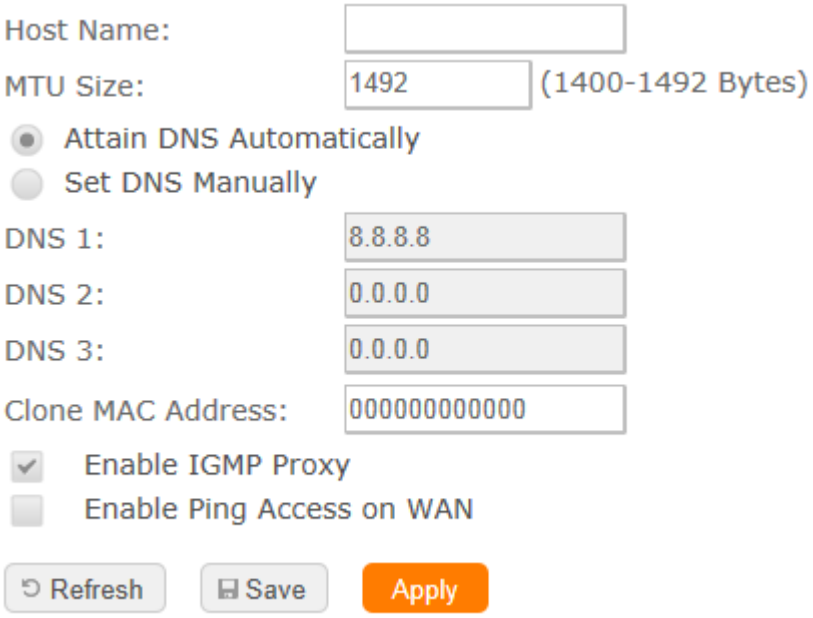
PPPoE



Item	Description
User Name	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Password	Input the password provided by your ISP.
Service Name	Input the service name provided by your ISP.

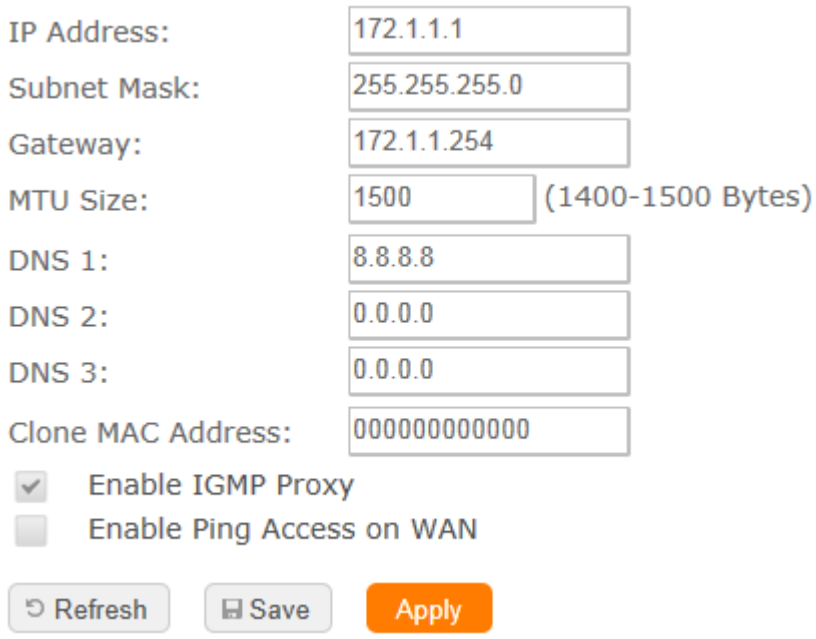
Connection Type	Three types for select: Continues, Connect on Demand, and Manual.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Save & Apply	Click on Save to save the setting date, the Apply button for execute current configuration.

DHCP



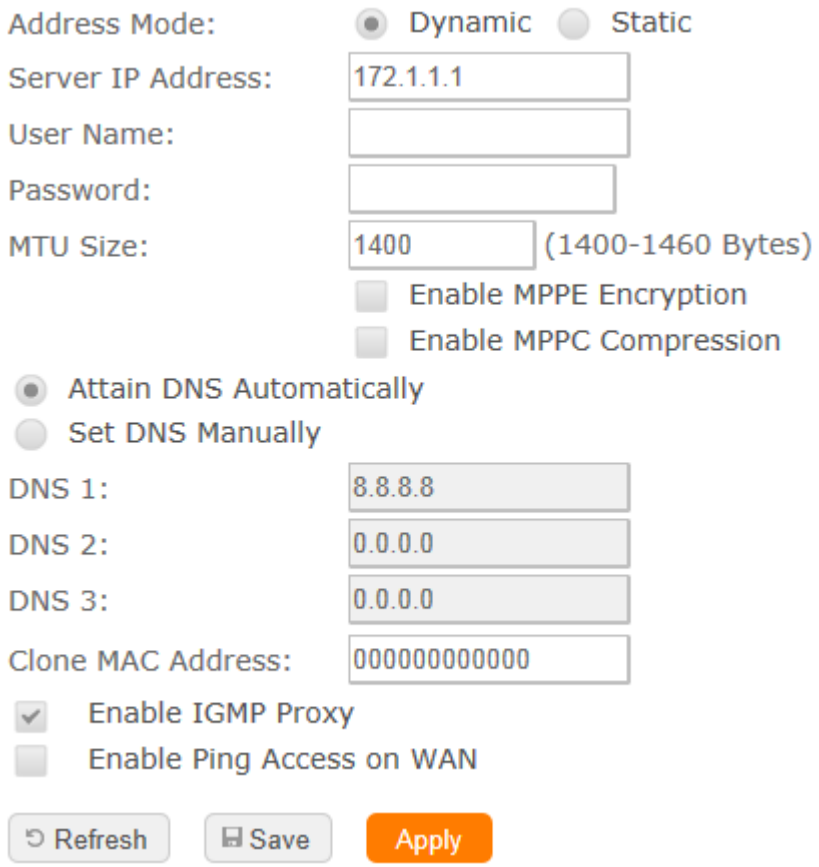
Item	Description
Host Name	You can keep the default as the host name, or input a specific name if required by your ISP.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Save & Apply	Click on Save to save the setting date, the Apply button for execute current configuration.

Static IP



Item	Description
IP Address	Enter the IP address which is provided by your ISP.
Subnet Mask	Please enter the Subnet Mask address
Gateway	Input ISP Default Gateway Address.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Save & Apply	Click on Save to save the setting date, the Apply button for execute current configuration.

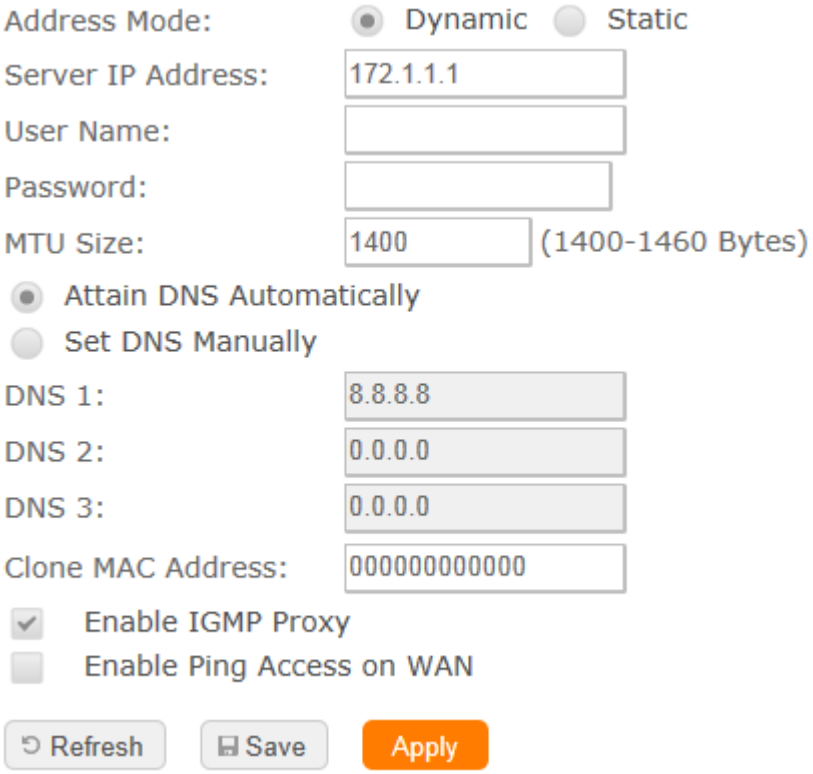
PPTP



Item	Description
Enable Dynamic Route	Enable or Disable dynamic route
IP Address	Enter the IP address which is provided by your ISP.
User Name	Input PPTP account provided by your ISP.
Password	Input the password provided by your ISP.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
Enable MPPE Encryption	Microsoft Point-to-Point Encryption (MPPE) provides data security for the PPTP connection that is between the VPN client and VPN server.
Enable MPPC Compression	Microsoft Point-to-Point Compression (MPPC) is a scheme used to compress Point-to-Point Protocol (PPP) packets between Cisco and Microsoft client devices. The MPPC algorithm is designed to optimize bandwidth utilization in order to support multiple simultaneous connections. The MPPC algorithm uses a Lempel-Ziv (LZ) based algorithm with a continuous history buffer, called a dictionar
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider

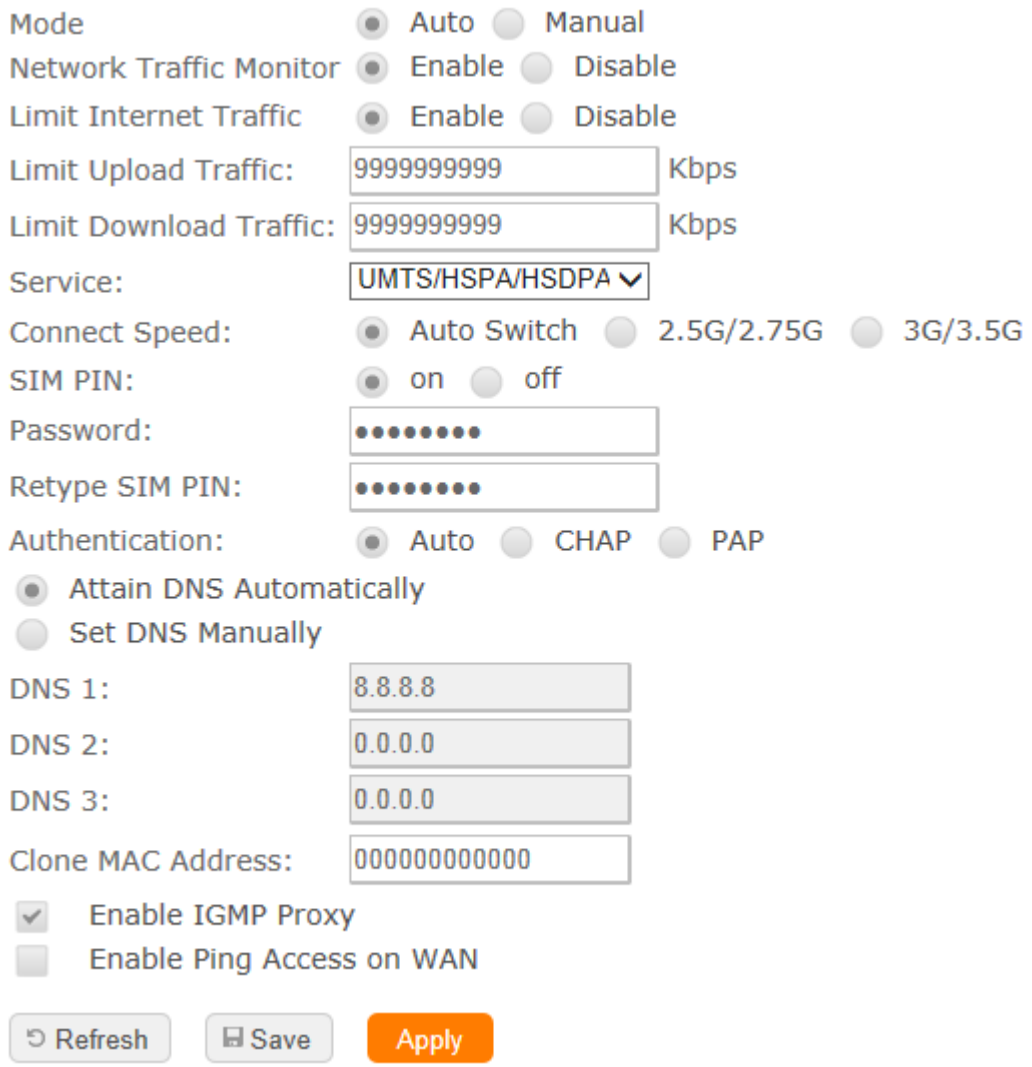
	to "Clone MAC Address"
Save & Apply	Click on Save to save the setting date, the Apply button for execute current configuration.

L2TP



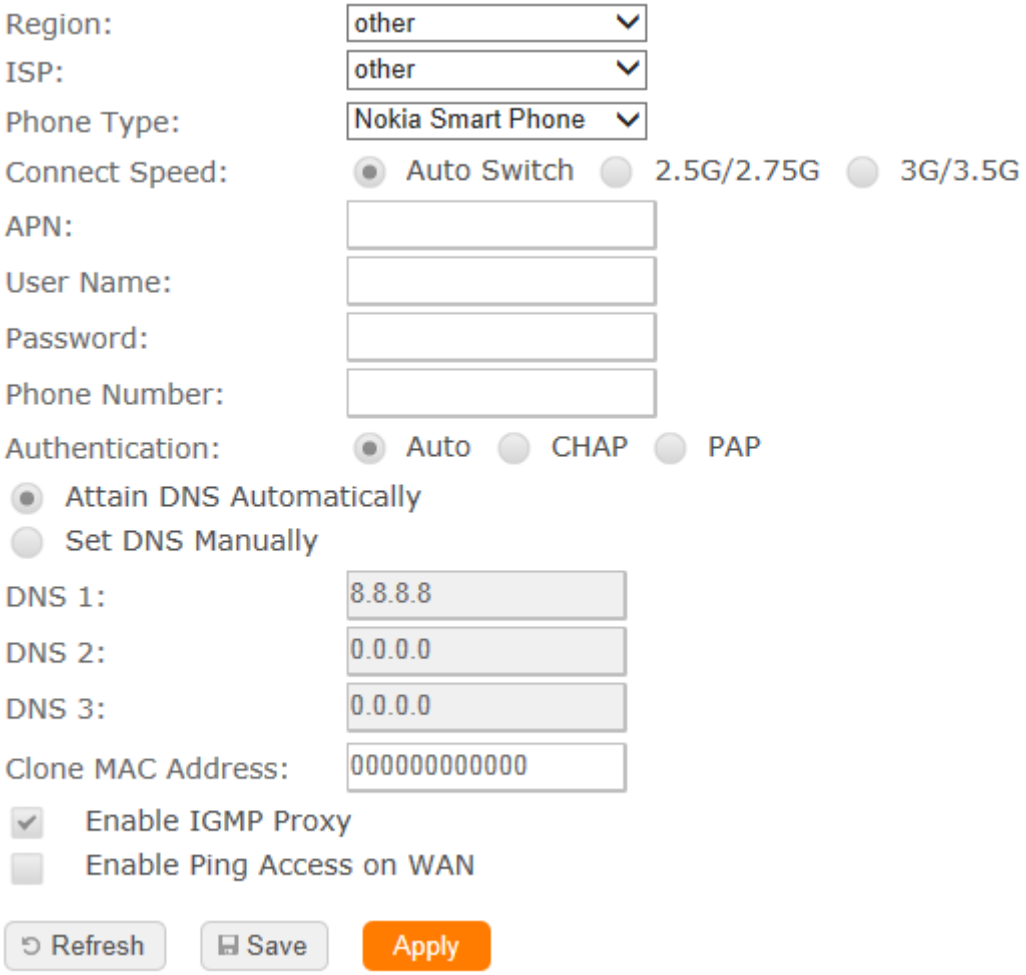
Item	Description
Enable Dynamic Route	Enable or Disable dynamic route
IP Address	Enter the IP address which is provided by your ISP.
User Name	Input L2TP account provided by your ISP.
Password	Input the password provided by your ISP.
MTU Size	Maximum Transmission Unit. Usually provide by computer operation systems (OS). Advanced users can set it manually.
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"
Save & Apply	Click on Save to save the setting date, the Apply button for execute current configuration.

3.5G



Item	Description
Mode	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Network Traffic Monitor	BR261c will record 3.5G traffic usage volume
Limit Internet Traffic	User can limit 3.5G traffic usage volume to prevent over budget
Connection Speed	Provide 3 kinds of speed，auto is recommended
SIM PIN	SIM card PIN number
Authentication	Provide 3 kinds of authentication methods，auto is recommended
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"

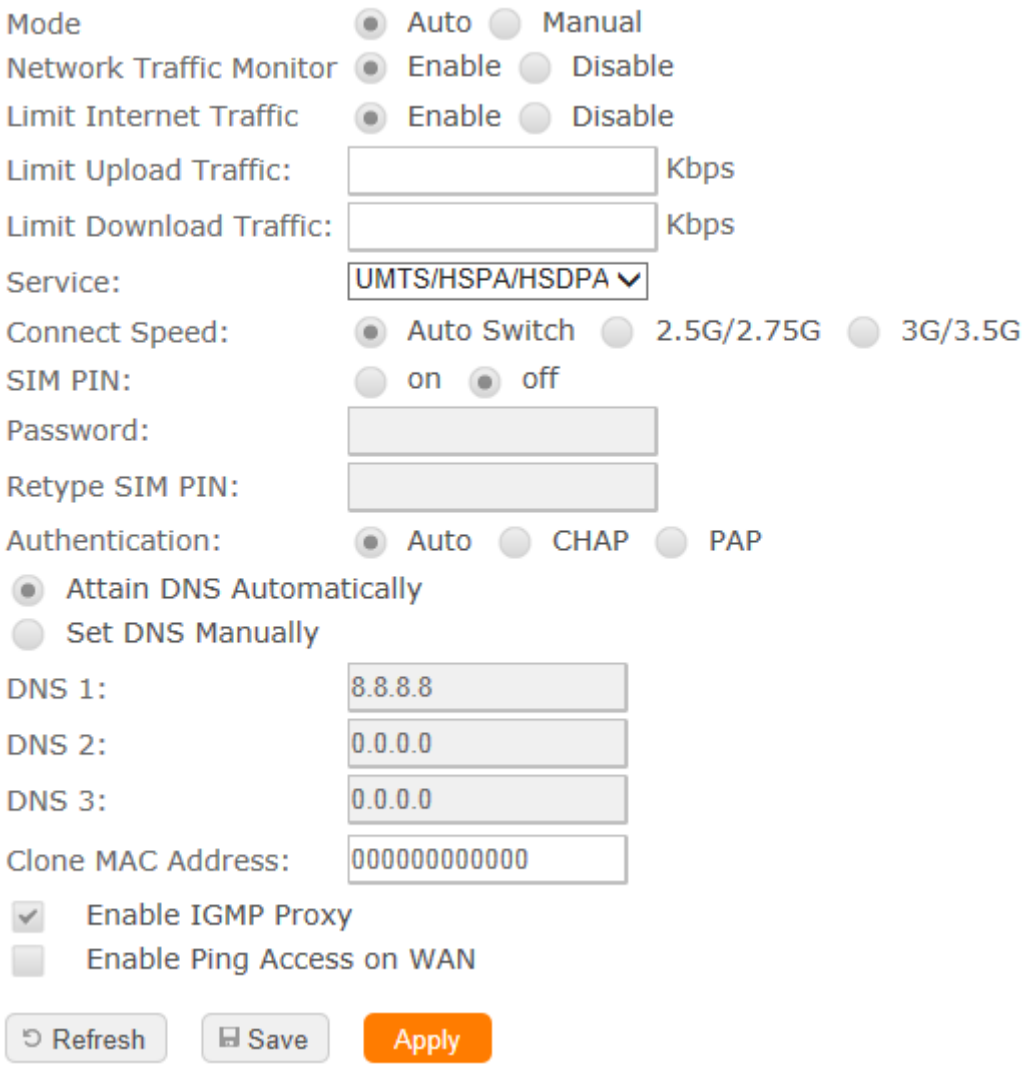
Smart Phone



Item	Description
Region	Select correct phone service region
ISP	Select correct phone service ISP
Phone Type	BR261c support 4 kinds of smart phone、Nokia、Black Berry、Sansung、iPhone and Andriod phone **iPhone and Andriod phone do not need to do any setting , all you need is to turn on hotspot function and connect it to USB port**
Connect Speed	Provide 3 kinds of speed，auto is recommended
APN	Please check Smart phone ISP to get APN data
User Name	Please check Smart phone ISP to get user name
Password	Please check Smart phone ISP to get password
Phone number	Please check Smart phone ISP to number data
Authentication	Provide 3 kinds of authentication methods，auto is recommended

DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"

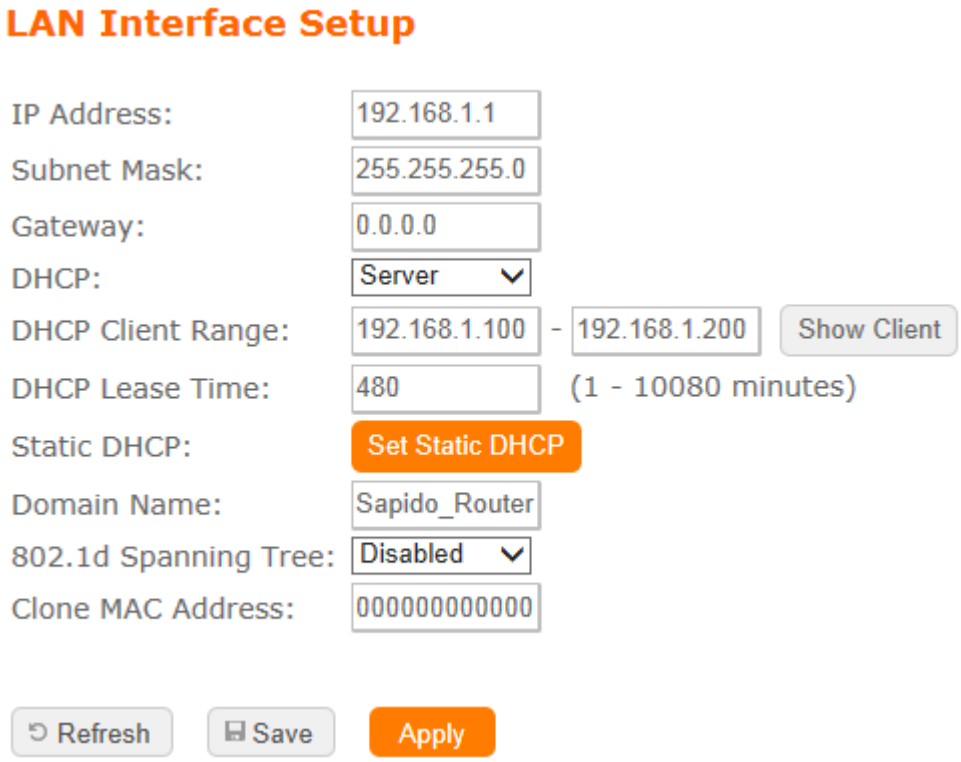
LTE



Item	Description
Mode	Input your user name provided by your ISP. If you don't know, please check with your ISP.
Network Traffic Monitor	BR261c will record 3.5G traffic usage volume
Limit Internet Traffic	User can limit 3.5G traffic usage volume to prevent over budget
Connection Speed	Provide 3 kinds of speed，auto is recommended
SIM PIN	SIM card PIN number
Authentication	Provide 3 kinds of authentication methods，auto is recommended
DNS	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS 1 2 3.
Clone Mac Address	Some ISPs require MAC address registration. In this case, enter the MAC address registered to the provider to "Clone MAC Address"

LAN

Use this page to set up the local IP address and subnet mask for your router. Please select LAN Interface Setup under the IP Config menu and follow the instructions below to enter the LAN setting page to configure the settings you want.



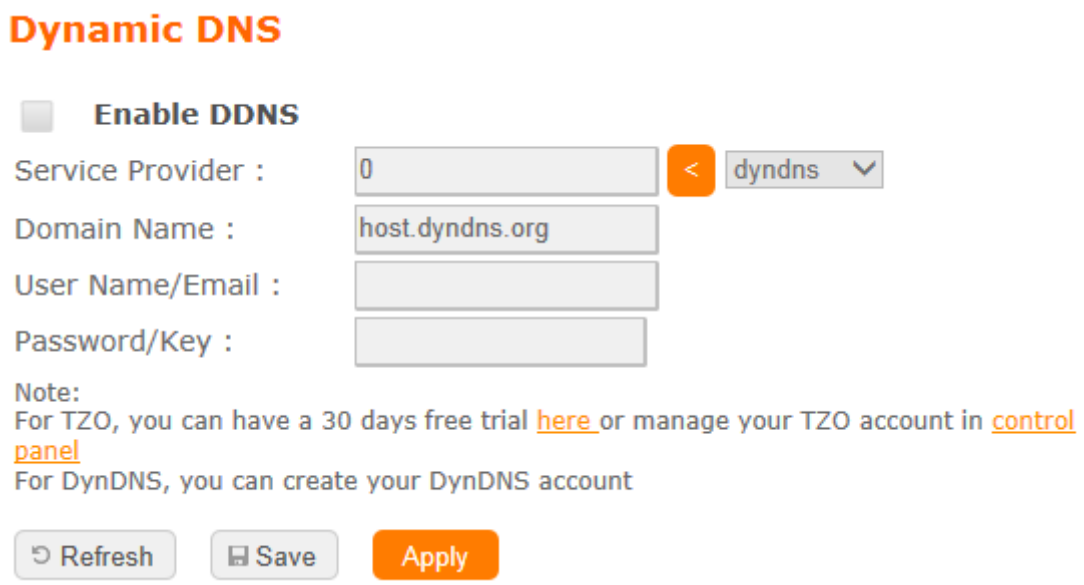
Item	Description
IP Address	The default value of LAN IP address is 192.168.1.1 for this router.
Subnet Mask	Input Subnet Mask, normally it is 255.255.255.0.
Gateway	Input ISP Default Gateway Address. If you don't know, please check with your ISP.
DHCP	Enable or disable DHCP services. The DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer if enabled.
DHCP Client Range	Define the DHCP client range and then the DHCP server will assign an IP to the requesting computer from this range. The Show Client will display every assigned IP address, MAC address, and expired time. The default range is 192.168.1.100 - 192.168.1.200.
DHCP Lease Time	IP avaliable time
Static DHCP	Please refer IP Binding
Domain Name	The name of device
802.1d Spanning Tree	IEEE 802.1d Spanning Tree Protocol (STP) is a link layer network protocol that ensures a loop-free topology for any bridged LAN. The main purpose of STP is to ensure that you do not create loops when you have redundant paths in your network. Loops are

	deadly to a network.
Clone MAC Address	Copy the MAC address from the device you had registered to your ISP if your ISP asks for the specific MAC Address.

DDNS

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.



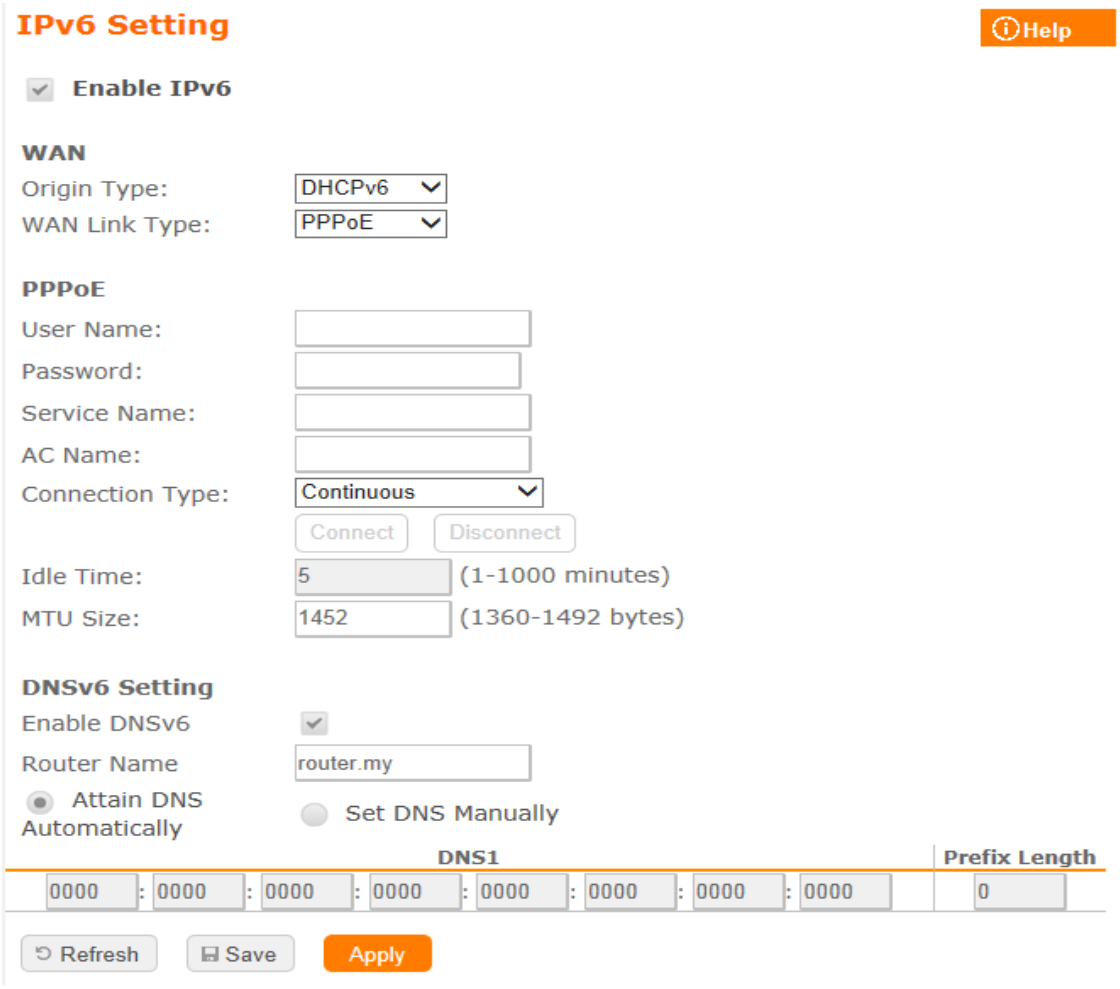
Please enter Domain Name, User Name/Email, and Password/Key. After entering, click on Apply Changes to save the setting, or you may click on Reset to clear all the input data.

Item	Description
Enable/Disable DDNS	Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically.
Service Provider	Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP, ODS, Regfish embedded in BR261c .
User Name/Email	User name is used as an identity to login Dynamic-DNS service.
Password/Key	Password is applied to login Dynamic-DNS service.
Save & Apply	Click on “Save” to save the setting data. The “Apply” button can execute current configuration

5.27.3 Ipv6 Config

IPV6 is the latest revision of the internet protocol, the communication protocol that provides and identification and location system for computers on networks and routes traffic across the internet.

Ipv6 is intended to replease Ipv4 ,which still carries the vast majority of intenet traffic as now

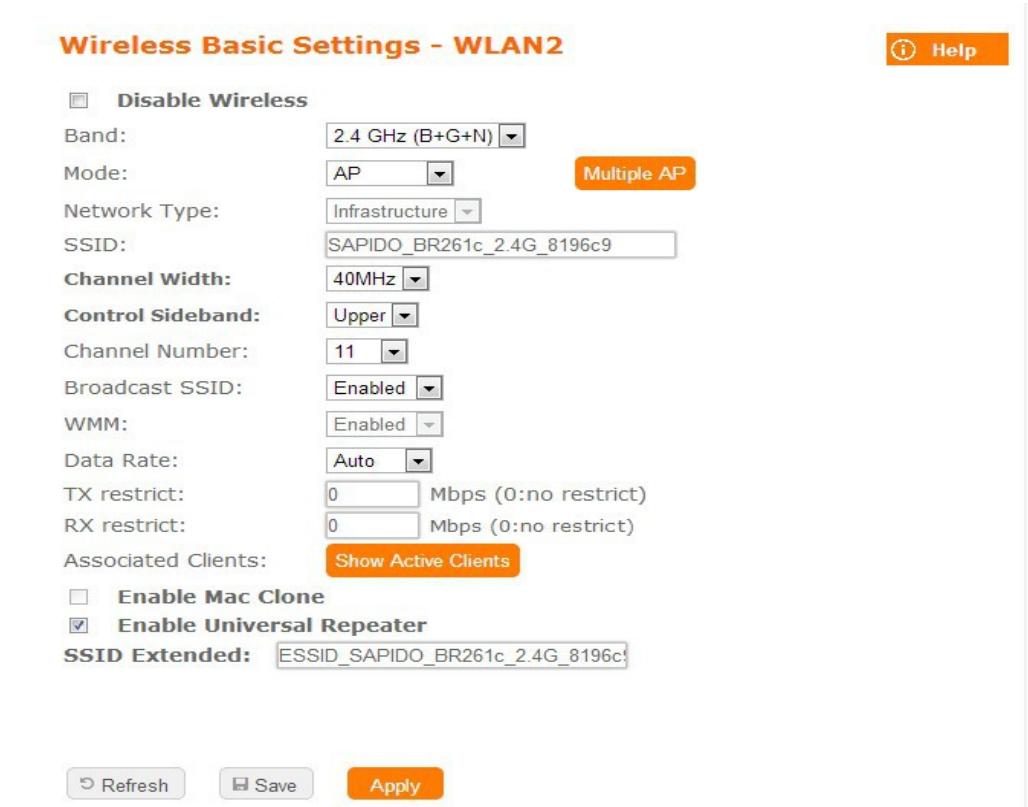


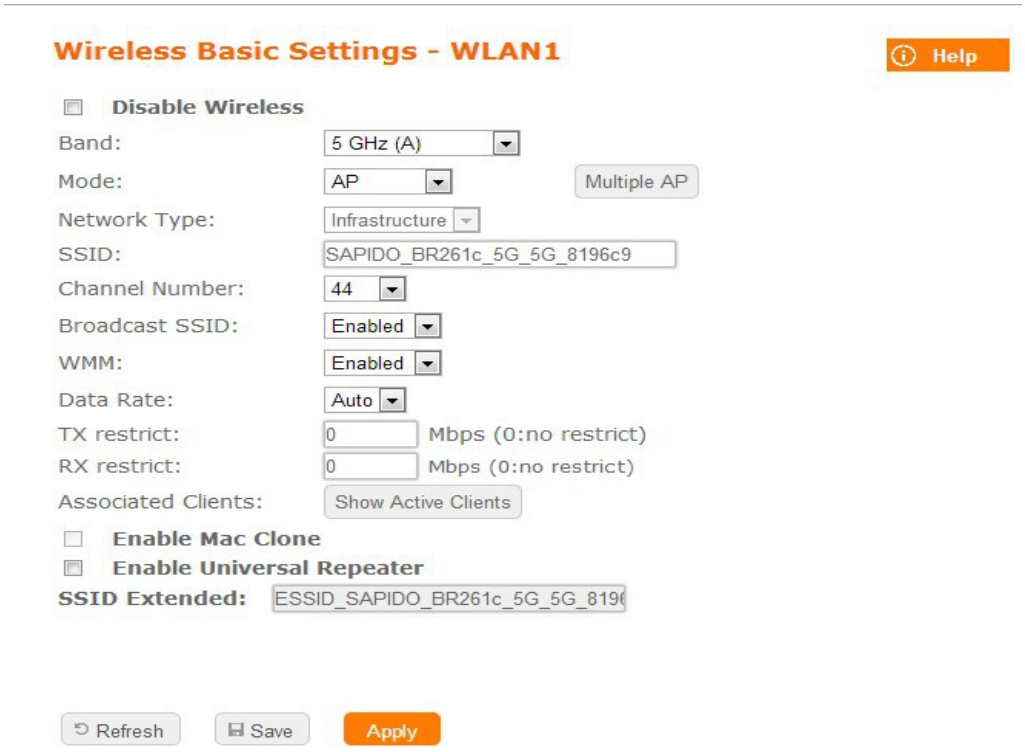
Item	Description
Origin Type	SLAAC、DHCPv6、IP。Please check ISP to get correct type
WAN Link Type	PPPoE、IP
PPPoE	Use IPv4 PPPoE account and password to do IPv6 connect
Child Prefix Address	Check ISP to get this data
Static IP	Check ISP to get IP address and default gateway IP address
Router Name	Router domain
DNSv6	Select Attain DNS Automatically. Or select Set DNS Manually, if you want to specify the DNS, and enter the DNS provided by your ISP in DNS

5.27.4 Wireless

User can set serval improtant wireless basic setting in here ,ex:SSID,ESSID,channel width,channel number. also can Disable or Enable the wireless signal. There are two separates page with 2.4Ghz and 5Ghz.

Wireless Basic Settings





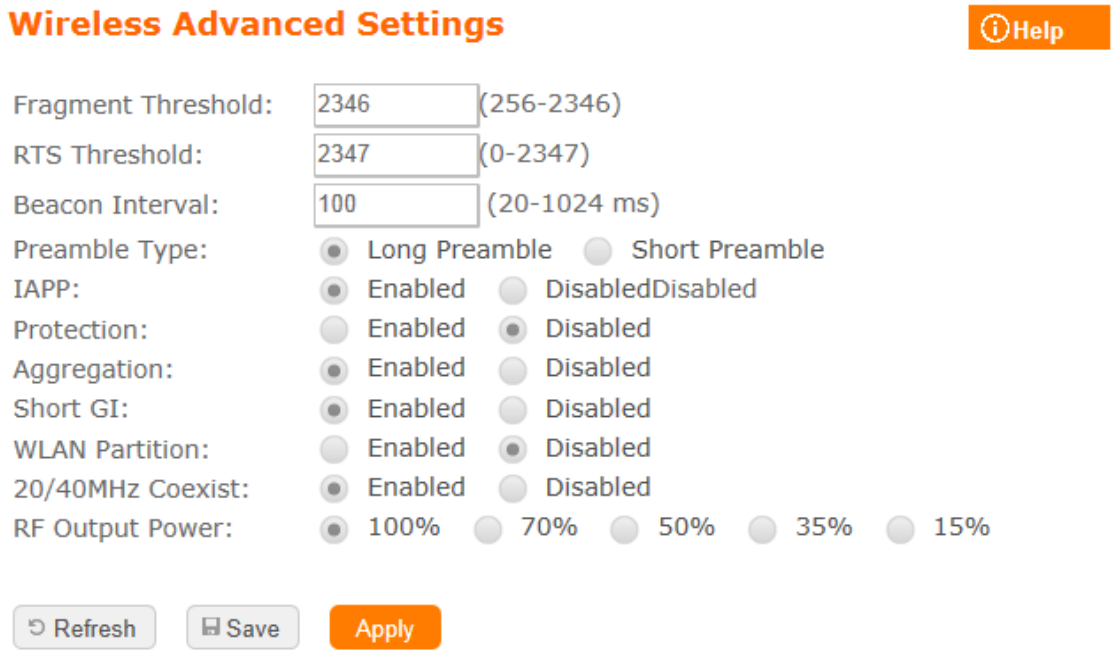
Item	Description
Disable Wireless	Turn off the wireless service.
Band-2.4GHz	Select the frequency. It has 6 options: 2.4 GHz (B/G/N/B+G/G+N/B+G+N).
Band-5GHz	Select the frequency. It has 6 options: 5 GHz (A/N/A+N/AC/N+AC/A+N+AC).
Mode	Select the mode. It has 3 modes to select: (AP, Client, WDS, AP+WDS). Multiple AP: Please check Section 4.1.2.1. * In Wi-Fi AP mode only support Client mode.
Network Type	• Infrastructure : one of the two methods for connecting to wireless networks with Wi-Fi enabled devices such as laptops, Pda's I-phone etc. These devices are connected to wireless network with the help of Access point (AP). Wireless Access Points are usually routers or switches which are connected to internet by Ethernet port. • Ad hoc : By using ad hoc mode, devices are capable for communicating directly with each other. No Access point (routers / switches) is required for communication between devices and all devices in the range connect in peer to peer communication mode.
SSID	Service Set identifier, users can define to any or keep as default.
Channel Width	Please select the channel width, it has 3 options: 20MHz / 40MHz / Auto
Control Sideband	Enable this function will control your router use lower or upper channel.
Channel Number-2.4GHz	Please select the channel; it has Auto, 1, 2~11 or 13 options.
Channel Number-5GHz	Please select the channel; it has Auto, 36,40,44,48,149,153,157,161 options.
Broadband SSID	User may choose to enable Broadcast SSID or not.
WMM	Enable / Disable Wi-Fi Multimedia
Data Rate	Please select the data transmission rate.
Associate Clients	Check the AP connectors and the Wireless connecting status.
Enable MAC Clone (Single Ethernet Client)	Clone the MAC address for ISP to identify.
Enable Universal Repeater Mode (Acting as AP and Client simultaneously)	Allow to equip with the wireless way conjunction upper level, provide the bottom layer user link in wireless and wired way in the meantime. (The IP that bottom layer obtains is from upper level.) Please also check Section 4.1.2.2
SSID of Extended Interface	While linking the upper level device in wireless way, you can set SSID to give the bottom layer user search.
Multiple AP	BR261c can register up to 4 SSIDs (wireless LAN

	group). It can be used as if there are multiple wireless LAN access points with one product. Each SSID could be set with different data rate, WMM and access type
Save & Apply	Click on “Save” to save the setting data. The “Apply” button can execute current configuration

Note:

If you want to use the 5 GHz frequency, ensure that your wireless devices and adapters have a 5 GHz capability to have access to the network

Advanced Settings

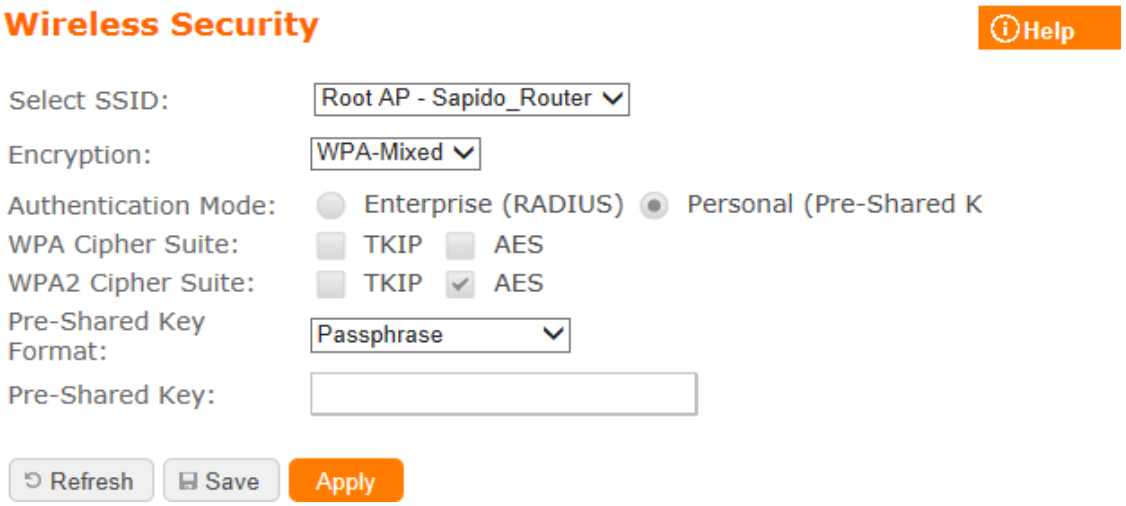


Item	Description
Fragment Threshold	To identify the maximum length of packet, the over length packet will be cut. The allowed range is 256-2346, and default length is 2346.
RTS Threshold	This value should remain at its default setting of 2347. The range is 0~2347. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the present RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. Fill the range from 0 to 2347 into this blank.
Beacon Interval	Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. The allowed setting range is 20-1024 ms..
Preamble Type	PLCP is Physical layer convergence protocol and PPDU is PLCP protocol data unit during transmission, the PSDU shall be appended to a PLCP preamble and header to create the PPDU. It has 2 options: Long Preamble and Short Preamble.
IAPP	Inter-Access Point Protocol is a recommendation that describes an optional extension to IEEE 802.11 that provides wireless access-point communications among multi-vendor systems.
Protection	Please select to enable wireless protection or not.
Aggregation	Enable this function will combine several packets to one and transmit it. It can reduce the problem when mass

	packets are transmitting.
Short GI	Users can get better wireless transmission efficiency when they enable this function.
WLAN Partition	Shut down the communication between the connected wireless LAN devices. If you set up as "Enabled", devices connected with the router, such as a printer, will not be able to use. Default Setting: "Disabled"
20/40MHz Coexist	Configure 20/40MHz coexisting scheme. If you set up as "Enabled", "20MHz" and "40MHz" will coexist. Normally use as "Disabled". Default Setting: "Disabled"
RF Output Power	Users can adjust RF output power to get the best wireless network environment. Users can choose from 100%, 70%, 50%, 35%, and 15%.

Security

Here users define the security type and level of the wireless network. Selecting different methods provides different levels of security. Please note that using any encryption may cause a significant degradation of data throughput on the wireless link. There are five Encryption types supported: “None”, “WEP”, “WPA”, ”WPA2”, and “WPA-Mixed”. And TKIP/AES encryption security. Enabling any encryption can protect your data from eavesdroppers. If you do not need this feature, select “None” to skip the following setting.



Item	Description
WEP	WEP is the most general encryption scheme among wireless LAN security, configure the common encrypted key (WEP Key) for access point and wireless LAN handset. WEP key length are "64bit", "128bit", and "256bit" (This product corresponds up to 128bit), larger the value is, more the character can be set, and encryption strength will enhanced. * If you configure the encryption key as "5 letters in half-width alphabets and numbers" or "Hexadecimal in 10 digits", please select "64-bit". * If you configure the encryption key as "13 letters in half-width alphabets and numbers" or "Hexadecimal in 26 digits", please select "128-bit".
WPA / WPA2	WPA/WPA2 is wireless LAN security standard which is strengthen over WEP. On WPA-PSK/WPA2-PSK, uses encrypted key called pre-shared key, and set up common encryption key for access point and wireless LAN handset like WEP. There are "AES" and "TKIP" as encryption scheme. "TKIP" automatically updates the key at regular intervals, check and approve the

	communication, so it can communicate safer than WEP key which uses single encryption key for long time. "AES" is harder to decode comparing to "TKIP", so it can say tougher encryption scheme than "TKIP"
WPA-Mixed	Support WPA and WPA2 at the same time
802.1x Authentication Radius	For radius server authentication
Personal (Pre-Shared Key)	* If you configure Pre-Shared Key as "Hexadecimal in 64 digits", please select "Hex (64 characters) ". * If you configure encryption key in "8 to 63 letters in half-width alphabets and numbers", please select "Passphrase

Access Control

Please refer Wireless Access Control

WPS

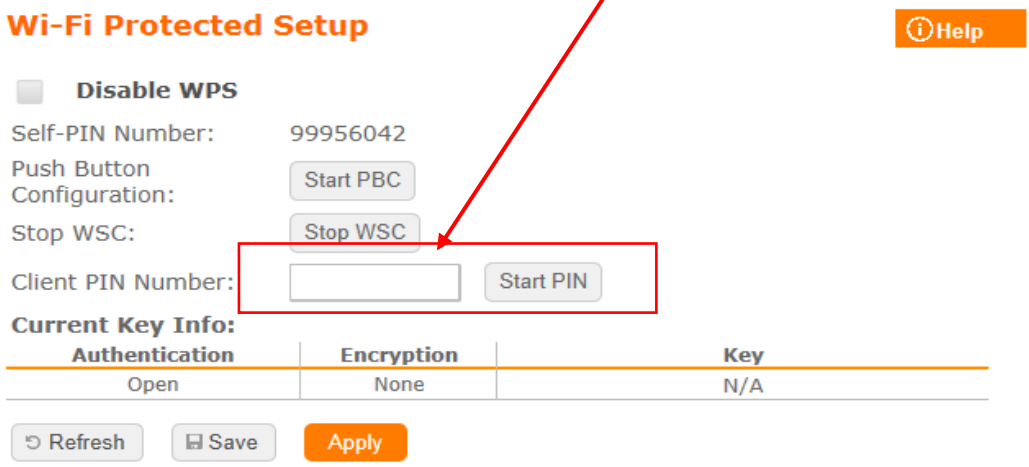
This page allows user to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client atomically synchronize it's setting and connect to the Access Point in a minute without any hassle. SAPIDO BR261c could support both Self-PIN or PBC modes, or use the WPS button (at real panel) to easy enable the WPS function.
PIN model, in which a PIN has to be taken either from a sticker label or from the web interface of the WPS device. This PIN will then be entered in the AP or client WPS device to connect.
PBC model, in which the user simply has to push a button, either an actual or a virtual one, on both WPS devices to connect.

BR261c WPS only support no encryption and WPA2

Please follow instructions below to enable the WPS function.

- **Setup Wireless LAN with WPS PIN :**
  - Get the WPS PIN number from wireless card and write it down.

- Fill in the PIN number from the wireless card in Client PIN Number field, and then click “Start PIN”.



- Click PIN from Adapter Utility to complete the WPS process with the wireless router.

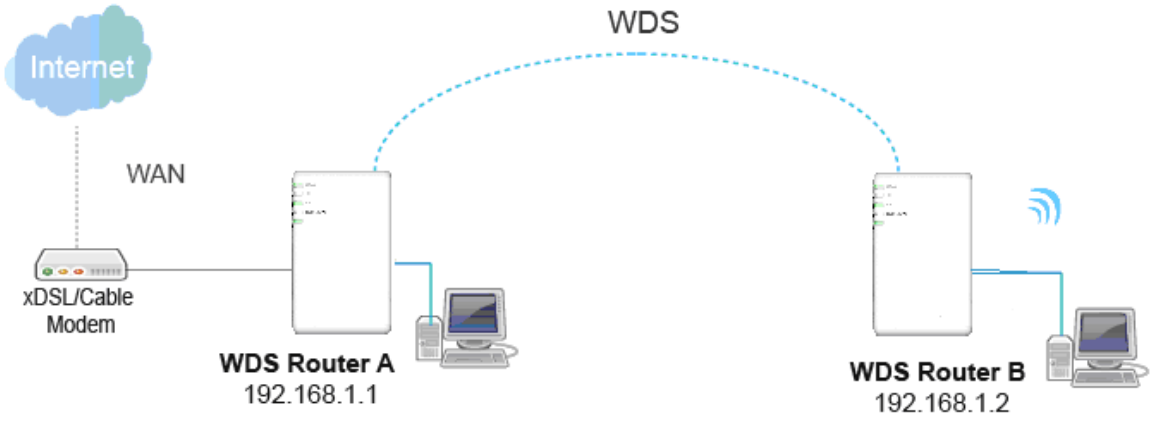
Wireless dongle should connect to BR261c

- Start PBC:
  - Press the BR261c WPS button and wait for WPS LED blinking
  - Press the dongle WPS button
  - Wireless dongle should connect to BR261c

WDS

When selected in the Basic Settings page and enabled here, Wireless Distribution System (WDS) enables the router to be used as a wireless bridge. Two Wireless-N Routers in bridge mode can communicate with each other through their wireless interfaces. To accomplish this, all wireless routers should be set to the same channel and the MAC address of other AP / Routers should be entered in the table.

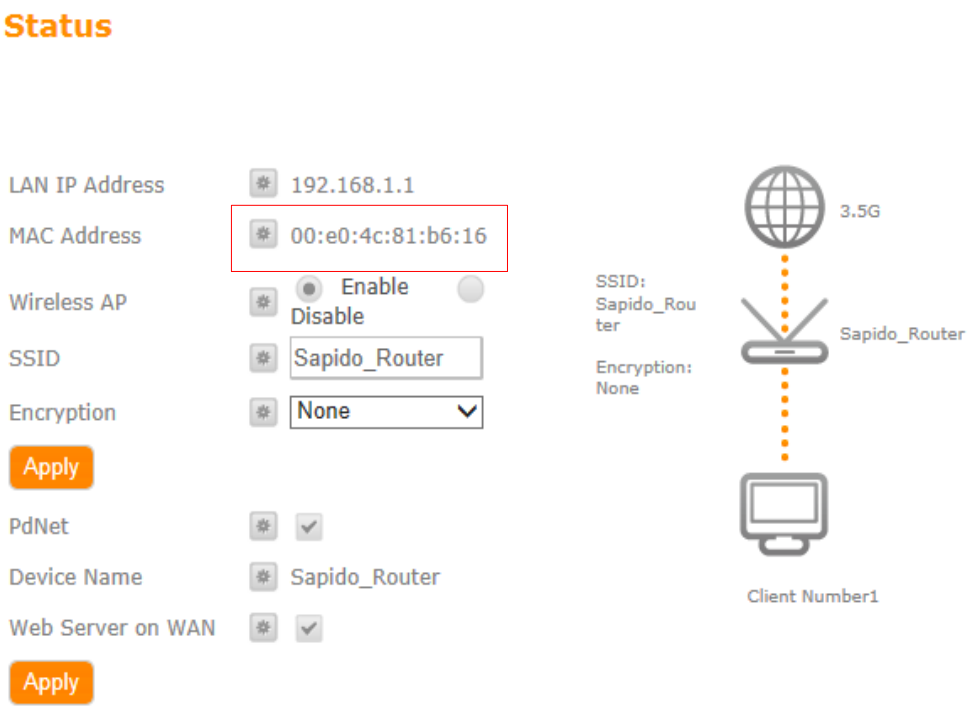
The WDS explanation is as the following picture



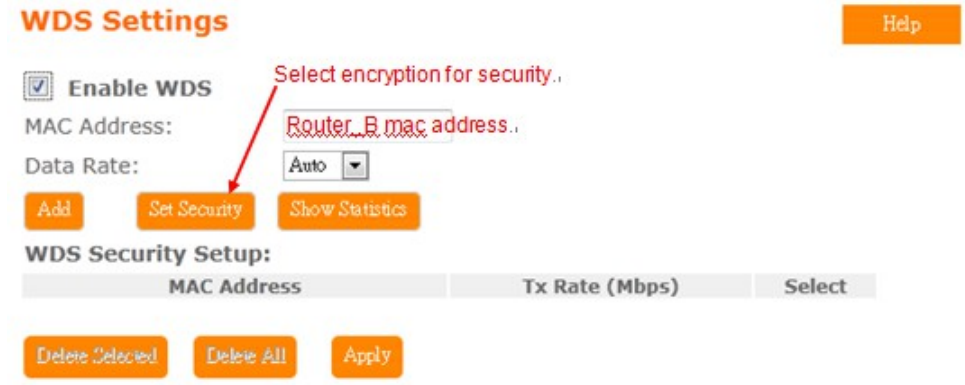
Router_A：

a Set the connection mode to “AP+WDS” from “Wireless Basic Setting”, and then select the channel number (this example is "11”). Click Apply Changes to save the setting.

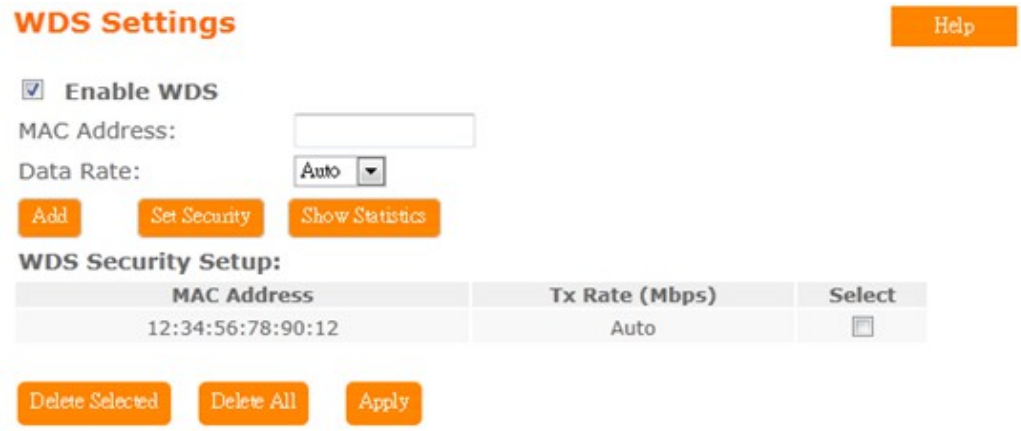
b Please check the MAC address



c Enable WDS function from the page – “WDS Setting”, and then fill in the MAC address of Router_B. Click Apply Changes to save the setting data

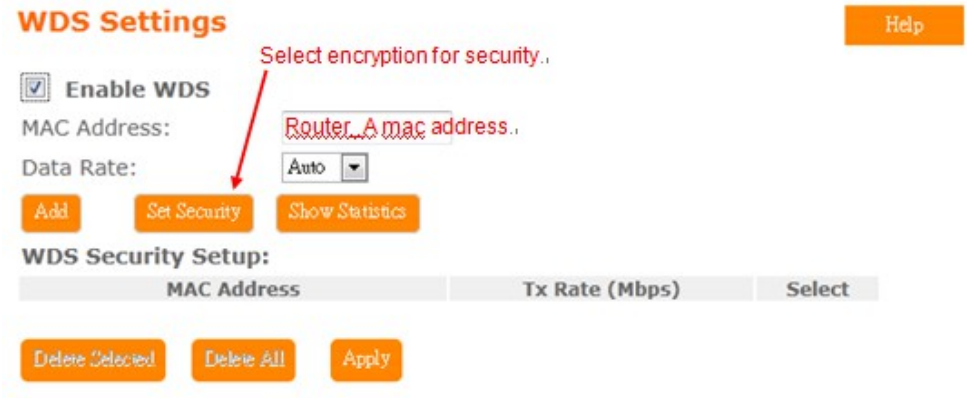


d The WDS AP List will show the WDS device MAC address

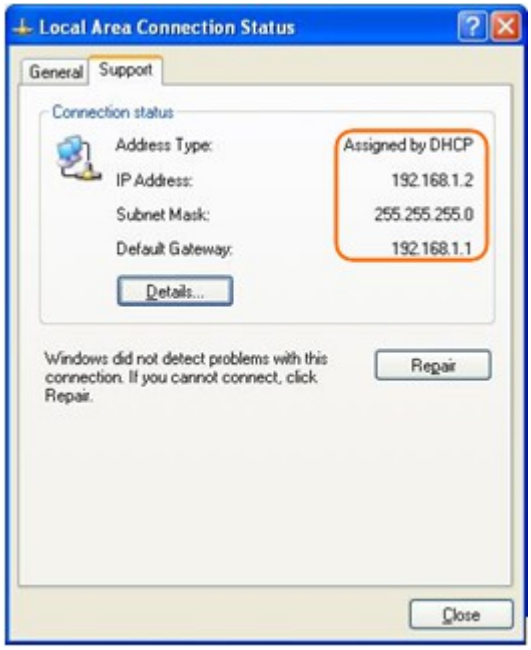


Router_B :

a Setup Router_B WDS



b Router_B LAN PC will get IP address from Router_A



If you failed the WDS setting, please check you setting with refer to the list below

	Router_A	Router_B
Wireless Mode	AP+WDS	WDS
LAN IP Address	Set the same segment as the router B(Note 1). Example :192.168.1.1.	Set the same segment as the router_A(Note 1). Example :192.168.1.2.
Security	Set the same security as Router_B.	Set the same security as Router_A.
DHCP	Enable	Disable.

Note 1: LAN IP address should be under the same segment but cannot be the same number.

Wireless Schedule

Please refer Wireless Schedule

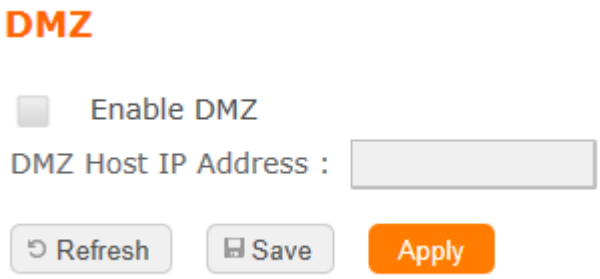
5.25.5 NAT

This section contains configurations for the BR261c 's advanced functions such as: virtual server, and DMZ to provide your network under a security environment

DMZ

The DMZ feature allows one local user to be exposed to the Internet for special-purpose applications like Internet gaming or videoconferencing. When enabled, this feature opens all ports to a single station and hence renders that system exposed to intrusion from outside. The port forwarding feature is more secure because it only opens the ports required by that application.

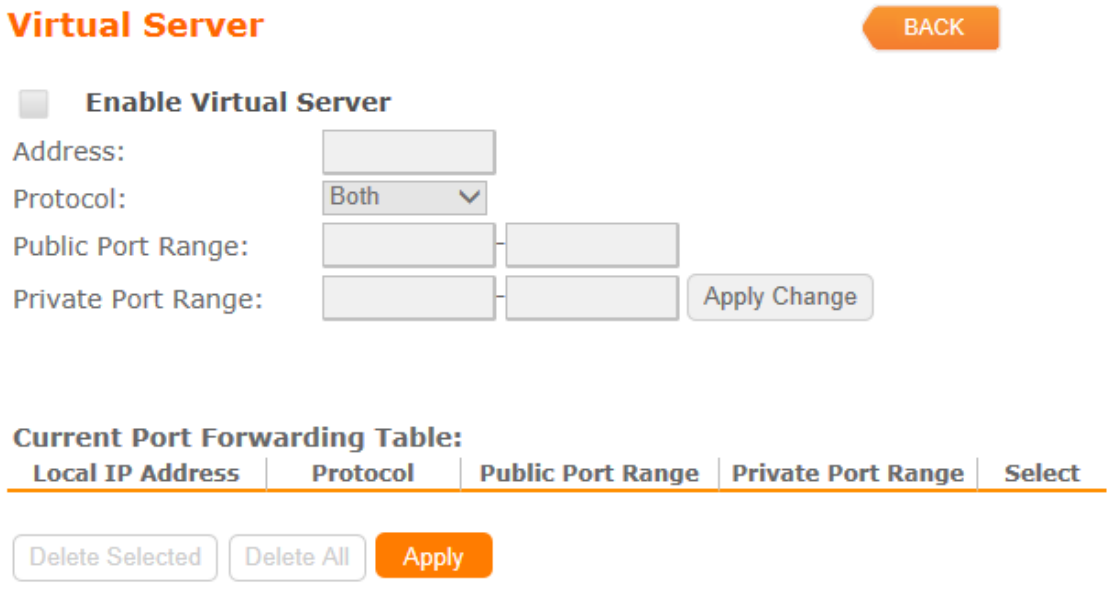
disabled and should have a new static IP Address assigned to it because its IP Address may be changed when using the DHCP function.



Item	Description
Enable DMZ	It will enable the DMZ service if you select it.
DMZ Host IP Address	Please enter the specific IP address for DMZ host.

Virtual Server

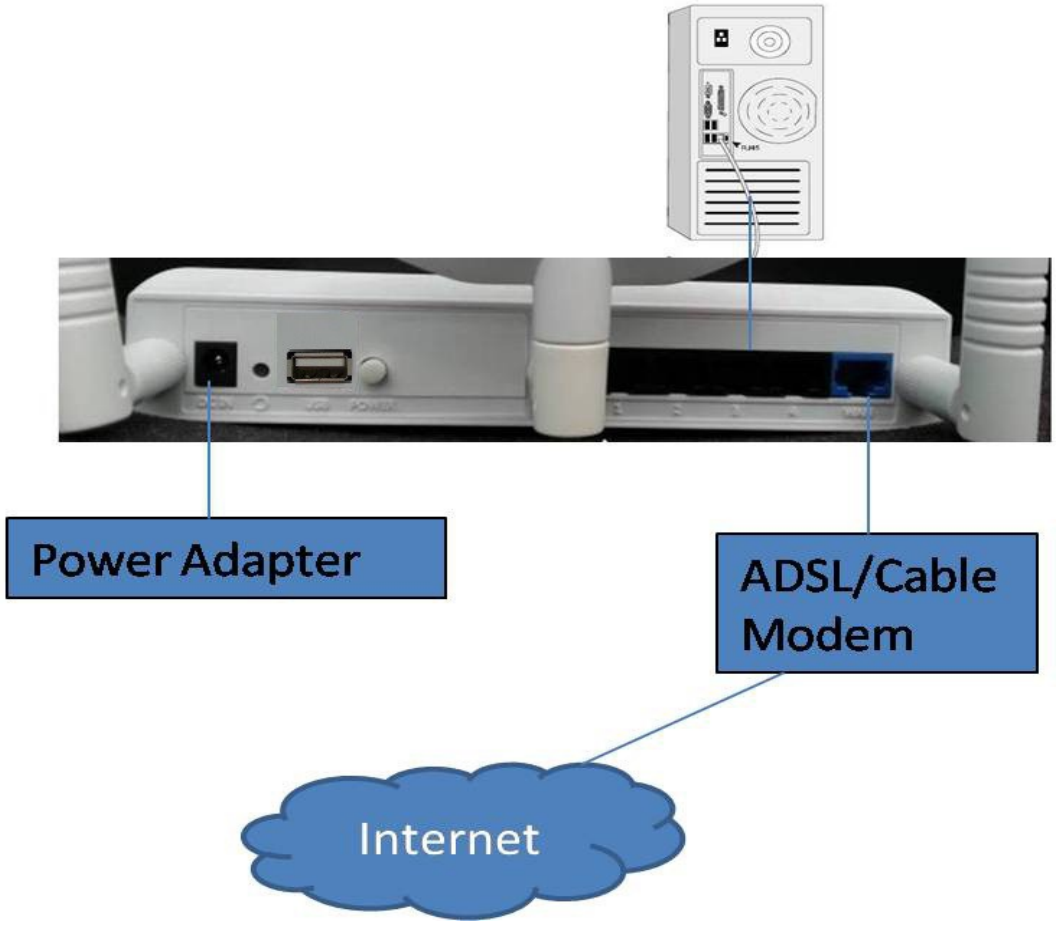
The Virtual Server feature allows users to create Virtual Servers by re-directing a particular range of service port numbers (from the WAN port) to a particular LAN IP



address.

Item	Description
Enable Port Forwarding	Select to enable Port Forwarding service or not.
Address	Specify the IP address which receives the incoming packets.
Protocol	Select the protocol type.
Public Port Range	Enter the port number, for example 80-80.
Private Port Range	Enter the port number, for example 20-22.
Current Port Forwarding Table	It will display all port forwarding regulation you made.
Delete Selected & Delete All	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

Please find the following figure to know that what the virtual server is. The web server is located on 192.168.1.100, forwarding port is 80, and type is TCP+UDP.



5.25.6 AirCloud Storage

Please refer File Menu

5.25.7AirCloud Monitor

Please refer Webcam Server

5.25.8 VPN Server

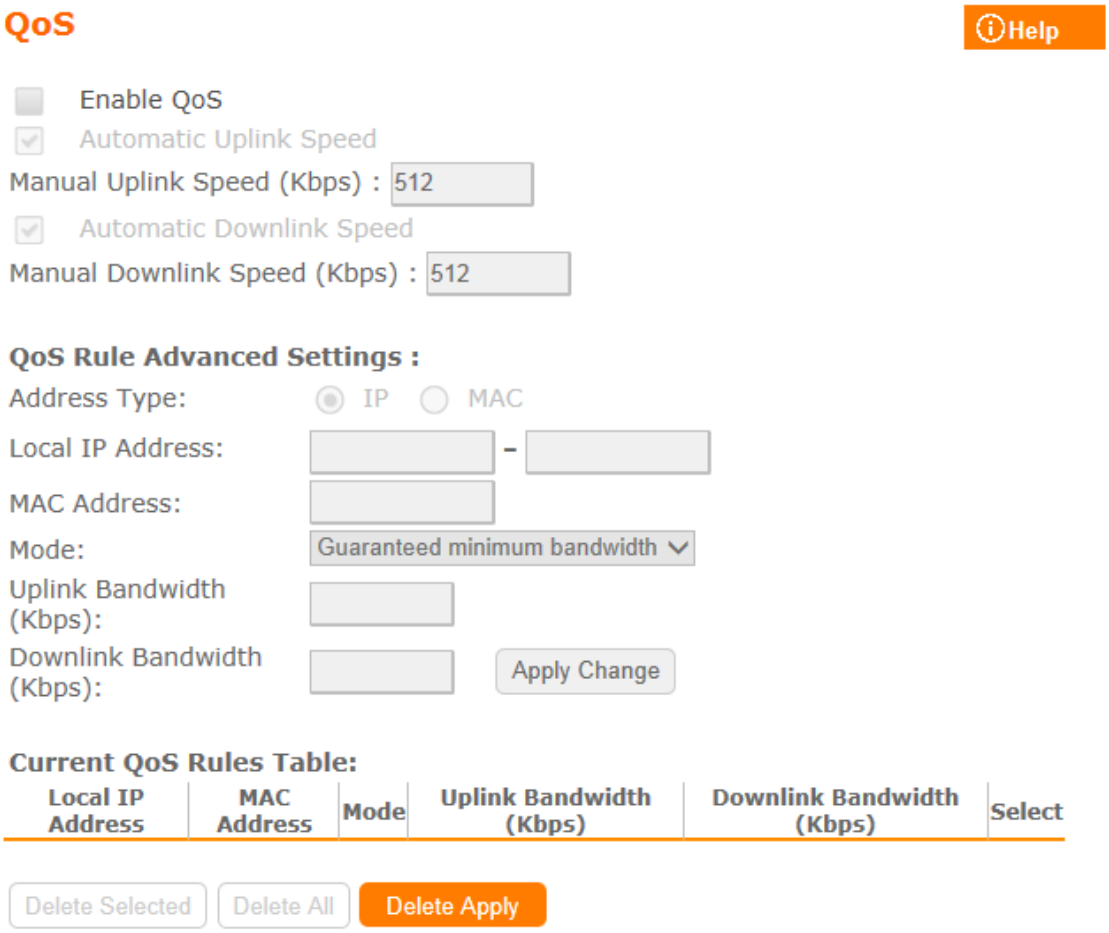
Please refer VPN Server

5.25.9 Firewall

DoS

Please refer DoS

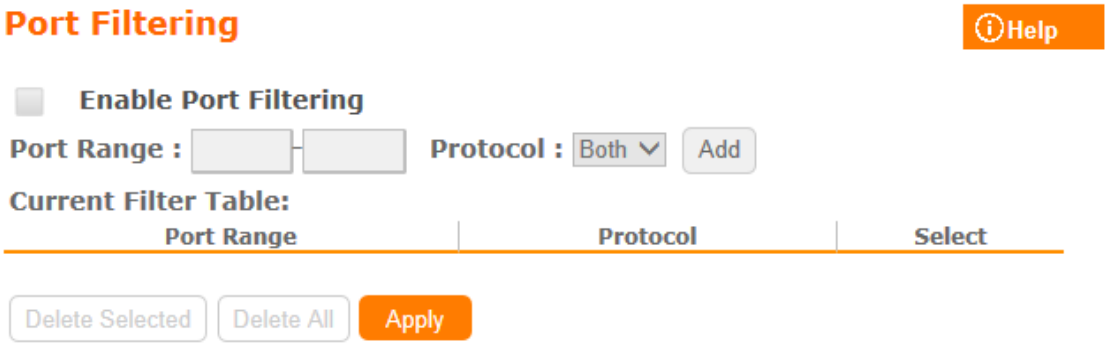
QoS



Item	Description
Enable QoS	Check “Enable QoS” to enable QoS function for the WAN port. You also can uncheck “Enable QoS” to disable QoS function for the WAN port.
Automatic uplink speed	Check the Automatic uplink speed.
Manual Uplink speed	Input uplink bandwidth manually
Automatic downlink speed	Check the Automatic downlink speed.
Manual Downlink speed	Input downlink bandwidth manually
Address Type	Set QoS by IP Address or MAC address
Local IP Address	Set local IP Address if the address type is by IP Address

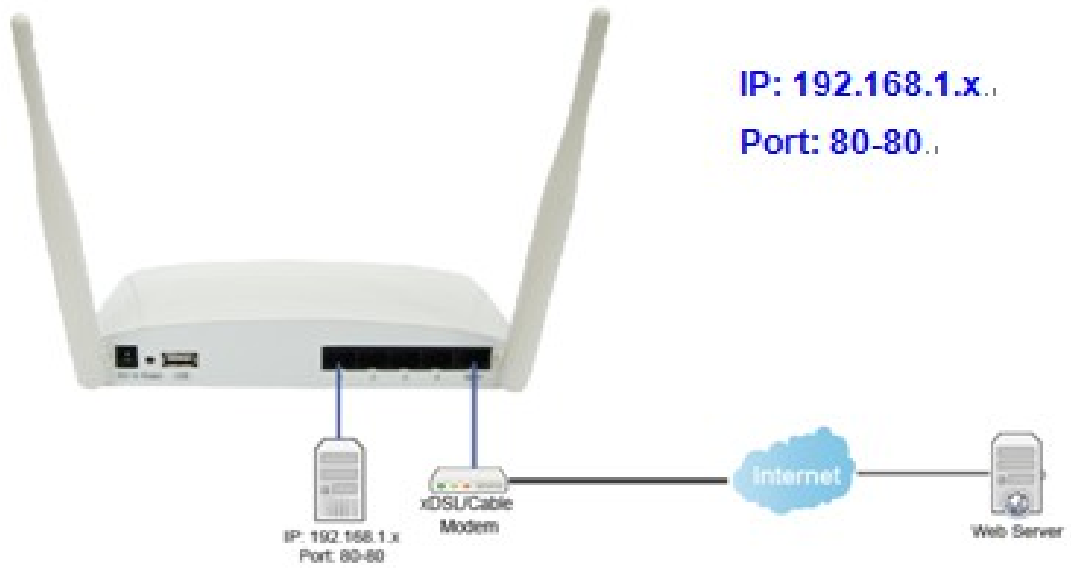
MAC Address	Set MAC Address if the address type is by MAC Address
Mode	Select Guaranteed minimum bandwidth or Restricted maximum bandwidth
Uplink Bandwidth	Key in the bandwidth.
Downlink Bandwidth	Key in the bandwidth.

Port Filtering



Item	Description
Enable Port Filtering	Select Enable Port Filtering to filter ports.
Port Range	Enter the port number that needs to be filtered.
Protocol	Please select the protocol type of the port.
Add	Click on Add to save the setting data.
Current Filter Table	Check ISP to get IP address and default gateway IP address
Delete Selected & Delete All	It will display all ports that are filtering now.
DNSv6	Click Delete Selected will delete the selected item. Click Delete All will delete all items in this table.

Port 80 has been blocked as the following illustrate.



IP Filtering

Please refer IP Filtering

MAC Filter Schedule

Please refer Mac Filter Schedule

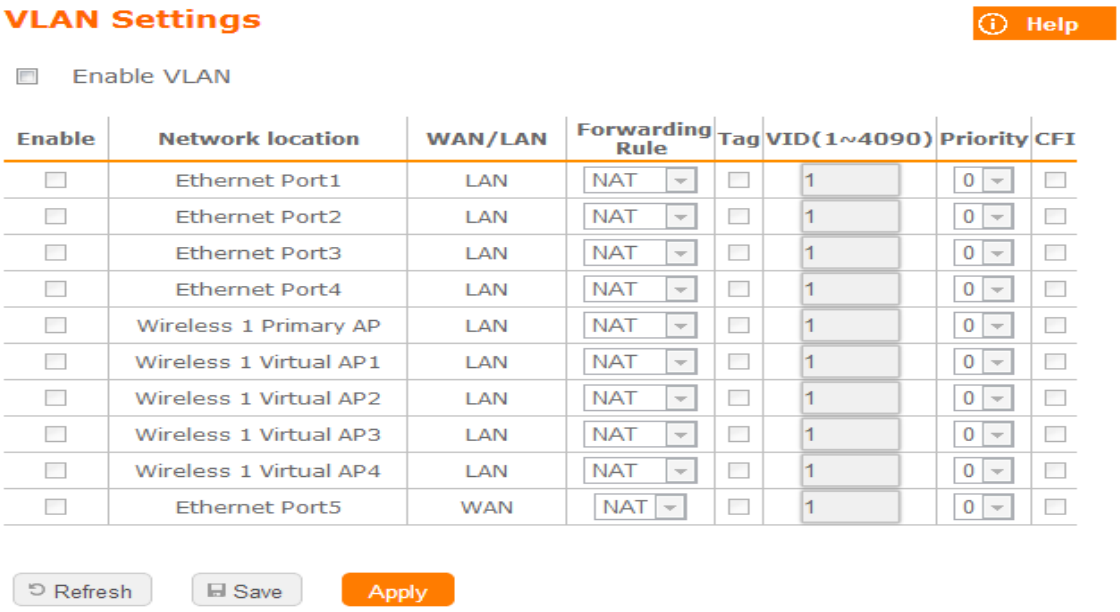
URL Filtering

Please refer URL Filtering

IP Binding

Please refer IP Binding

VLAN



Item	Description
Forwarding Rule	Bridge or NAT mode
Tag	Add VLAN tag to packet
VID	Set VLAN ID (1~4096)
Priority	It indicates the frame priority level. Values are from 0 (best effort) to 7 (highest); 1 represents the lowest priority
CIF	Enable or Disable CIF

5.25.10 System Management

This section including Wake on LAN, Change Username/Password, Upgrade Firmware, Profiles Save, Remote Management, Time Zone, UPnP, Route Setup, VPN Passthrough, and Wan Type Auto Detection. It is easy and helpful for users making more detailed settings

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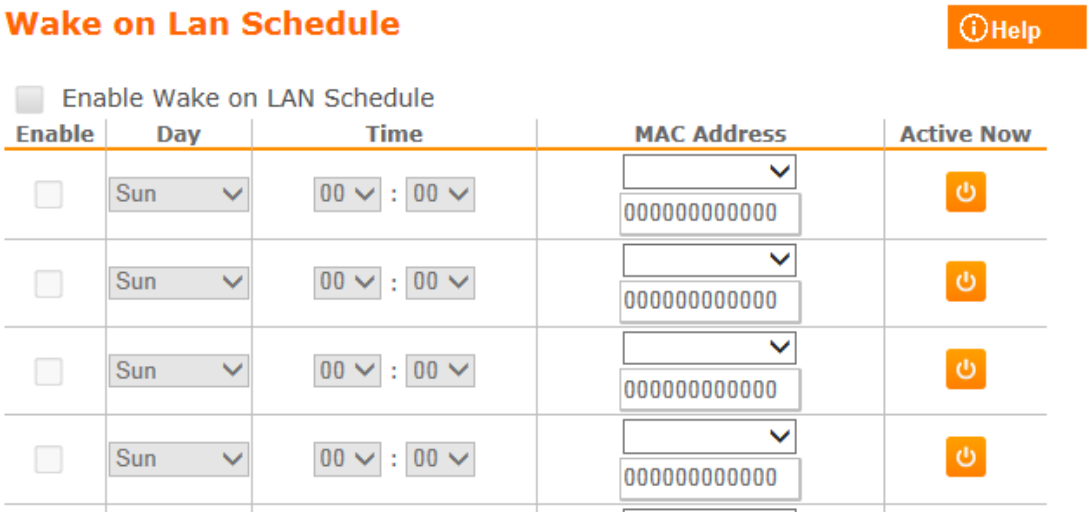
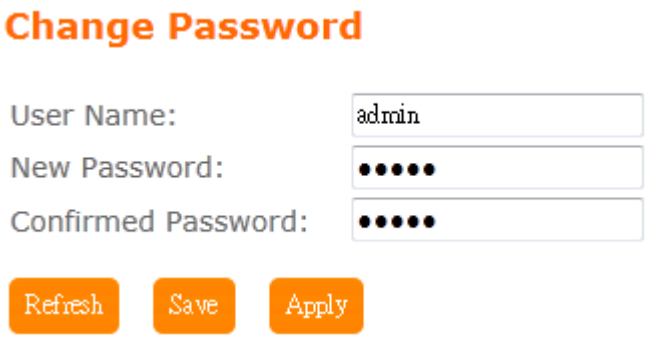
Wake on LAN

Switch your computer ON through your LAN or the Internet . To support WOL you must have a computer with Motherboard that supports WOL, as well as a Network Controller (NIC) supporting this function. Most of the newer Motherboard (circa 2002 and On), have an On Board NIC that supports WOL. Otherwise you need to install a PCI NIC that is WOL capable.



Change Password

Users can set or change user name and password used for accessing the web management interface in this section.



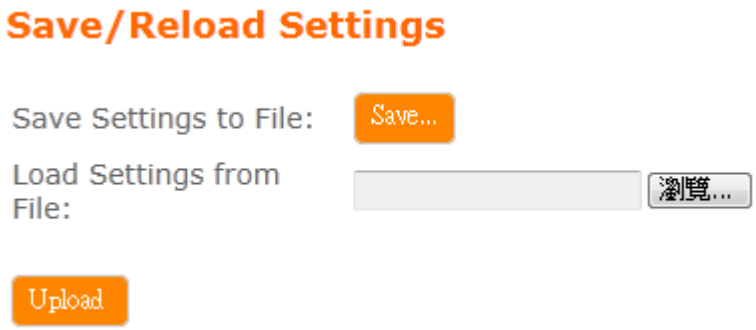
Input User Name and New Password, then input Confirm Password again.

Firmware Upgrade

Please refer Firmware Upgrade

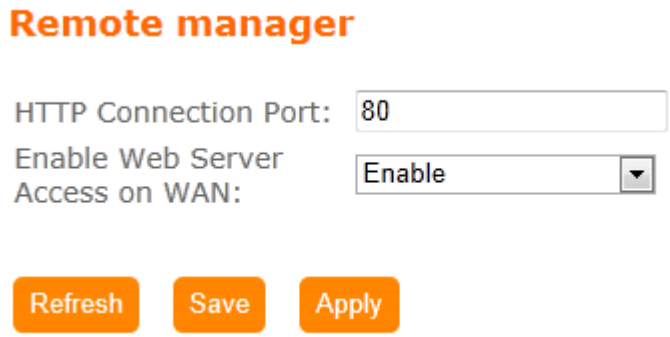
Profiles Save

Users can create a backup file that contains current router settings. This backup file can be used to restore router settings. This is especially useful in the event you need to reset the router to its default settings.



Remote Management

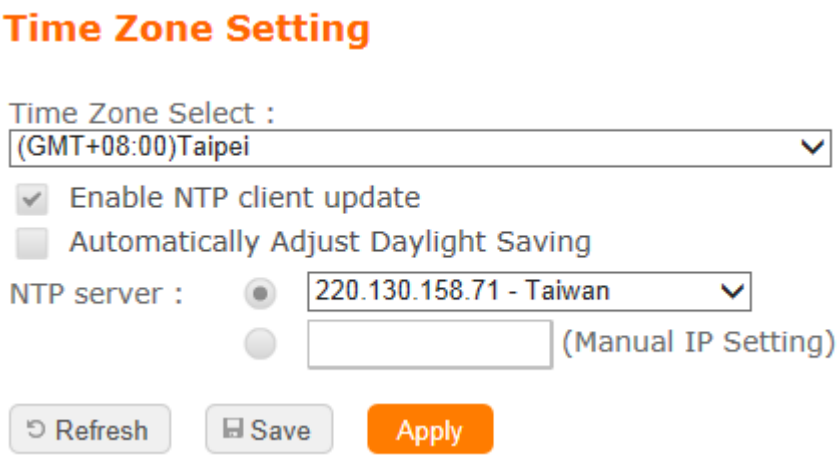
This page allows you to access the GUI on WAN



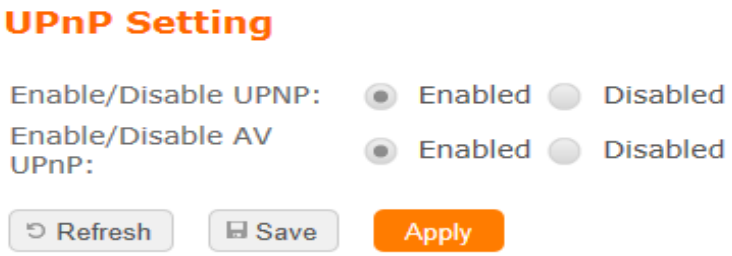
Item	Description
HTTP Connection Port	Users can access GUI by this port , default is 80
Enable Web Server Access on WAN	Allow user access GUI from WAN side

Time Zone

Users can select time zone and synchronize the local clock on the router.



UpnP

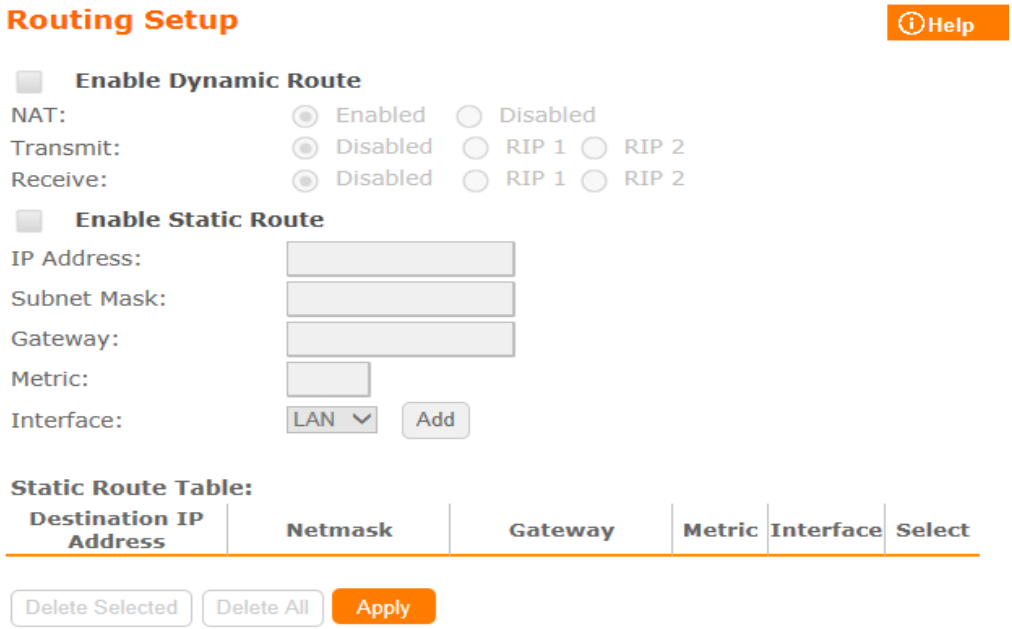


- UpnP
  Universal Plug and Play (UPnP) is a standard of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment) and in corporate environments for simplified installation of computer components. BR070N supports UPnP function, and can cooperate with other UPnP devices. When you activate UPnP, please click My Network Places. Users will see an Internet Gateway Device icon. By click the icon, users can enter the GUI of the router. If you do not wish to use UPnP, you can disable it.
- AV UpnP
  AV UPnP media server is the UPnP-server that provides media library information and streams media-data (like audio/video/picture/files) to UPnP-clients on the network. It is a computer system or a similar digital appliance that stores digital media, such as photographs, movies, or music and shares these with other devices. User can plug in USB disk to product USB port and use AV UPnP client to play USB disk media-data (like audio/video/picture/files)

Route Setup

Dynamic routing is a distance-vector routing protocol, which employs the hop count as a routing metric. RIP prevents routing loops by implementing a limit on the number of hops allowed in a path from the source to a destination. The maximum number of hops allowed for RIP is 15

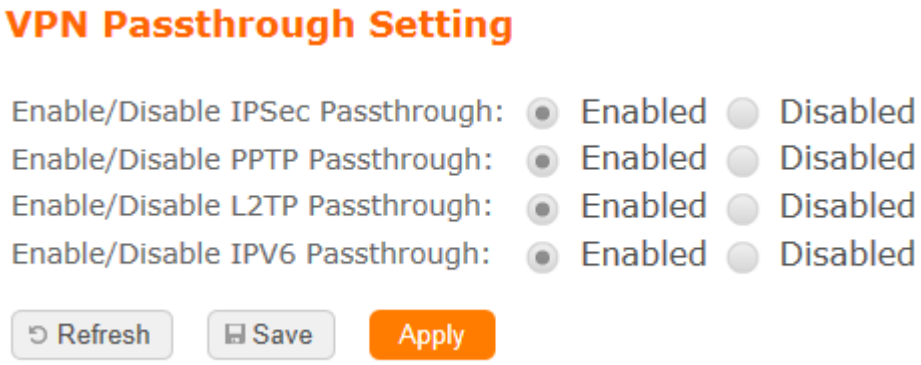
Static routing is a data communication concept describing one way of configuring path selection of routers in computer networks. It is the type of routing characterized by the absence of communication between routers regarding the current topology of the network.This is achieved by manually adding routes to the router routing table.



Item	Description
Enable Dynamic Route	Enable or Disable dynamic route
NAT	Enable or Disable NAT function
Transmit	There are 3 options： 1. Disable：do not send any RIP packet out 2. Send RIP1 packet out 3. Send RIP2 packet out
Receive	There are 3 options： 4. Disable：do not receive any RIP packet 5. Only receive RIP1 packet 6. Only receive RIP2 packet
Enable Static Route	Enable or Disable dynamic route
IP Address	Destination IP address
Subnet Mask	Destination IP subnet mask
Gateway	Gateway IP address for destination
Metric	Metric number on router’s routing table
Interface	Static route rule for LAN or WAN interface

VPN Passthrough

Virtual Private Networking (VPN) is typically used for work-related networking. For VPN tunnels, the router supports IPSec, Pass-through, PPTP Pass-through, and L2TP Pass-through.



Item	Description
IPSec Pass-through	Internet Protocol Security (IPSec) is a suite of protocols used to implement secure exchange of packets at the IP layer. To allow IPSec tunnels to pass through the router, IPSec Pass-through is enabled by default. To disable IPSec Pass-through , select Disable
PPTP Pass-through	Point-to-Point Tunneling Protocol is the method used to enable VPN sessions to a Windows NT 4.0 or 2000 server. To allow PPTP tunnels to pass through the router, PPTP Pass-through is enabled by default. To disable PPTP Pass-through, select Disable.
L2TP Pass-through	To allow the L2TP network traffic to be forwarded to its destination without the network address translation tasks.
IPV6 Pass-through	Allow IPV6 packet to be forwarded to its destination without the network address translation tasks.

Wan Type Auto Detection

When this function enable， BR261c can detect WAN connection way，ethernet（PPPoE、DHCP、Static IP）、3.5G、LTE

Chapter 6.Q & A

- Where is the XDSL Router installed on the network?
  A:In a typical environment, the Router is installed between the XDSL line and the LAN. Plug the XDSL Router into the XDSL line on the wall and Ethernet port on the Hub (switch or computer).

- Why does the throughput seem slow?
  A:To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the route in order to keep the quality of transmitting signal. Out of this condition you would better test something else.
  - Verify network traffic does not exceed 37% of bandwidth.
  - Check to see that the network does not exceed 10 broadcast messages per second.
  - Verify network topology and configuration.
- Why doesn't BR261c power up?
  A:Check if the output voltage is suitable, or check if the power supply is out of order.

- The Internet browser still cannot find or connect to BR261c after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.
  A:In case BR261c is inaccessible; you can try to restore its factory default settings. Please press the "Reset" button and keep it pressed for over 7 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

- Why does BR261c shut down unexpectedly?
  A:Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

- What is the default IP address of the router for LAN port?
  A:The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

- I don't know my WAN IP.
  A:There are two ways to know.
  Way 1:Check with your Internet Service Provider.
  Way 2:Check the setting screen of BR261c . Click on Status & Log item to select Network Configuration on the Main Menu. WAN IP is shown on the WAN interface.
- How can I check whether I have static WAN IP Address?
  A:Consult your ISP to confirm the information, or check Network Configuration in BR261c 's Main Menu.

- Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?

A:Yes, the Router mode allows for customization of your public IPs and Domain.

- Why can’t my computer work online after connecting to BR261c ?
  A: It’s possible that your Internet protocol (TCP/IP) was set to use the following IP address. Please do as the following steps. (Windows 2000 & XP) Start >Settings >Network and Dial-up Connections >double click on Internet Protocol(TCP/IP) >select obtain IP address automatically > Click on OK button. Then, open Internet browser for testing. If you still can’t go online, please test something else below.
  - Verify network configuration by ensuring that there are no duplicate IP addresses.
  - Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.
  - Check that the cables and connectors or use another LAN cable.

- Why can't I connect to the router's configuration utility?
  A:Possible Solution 1: Make sure that your Ethernet connect properly and securely. Make sure that you've plugged in the power cord.
  Possible Solution 2: Make sure that your PC is using an IP address within the range of 192.168.1.2 to 192.168.1.254. Make sure that the address of the subnet mask is 255.255.255.0. If necessary, the Default Gateway data should be at 192.168.1.1. To verify these settings, perform the following steps:

  Windows 2000, or XP Users:
  - Click on Windows Start >click on Run > input cmd > click on OK button.
  - At the DOS prompt, type ipconfig/all.
  - Check the IP Address, Subnet Mask, Default Gateway data. Is this data correct? If the data isn't correct. Please input ipconfig/release > press Enter > input ipconfig/renew > press Enter.

  Possible Solution 3: Verify the connection setting of your Web browser and verify that the HTTP Proxy feature of your Web browser is disabled. Make these verifications so that your Web browser can read configuration pages inside your router. Launch your Web browser.

  Internet Explorer Users:
  - Click on Tools > Internet Options > Connections tab.
  - Select never dial a connection, click on Apply button, and then click on OK button.
  - Click on Tools and then click on Internet Options.
  - Click on Connections and then click on LAN Settings.
  - Make sure none of the check boxes are selected and click on OK button.
  - Click on OK button.

  Netscape Navigator Users:
  - Click on Edit > Preferences > double-click Advanced in the Category window.

    - Click on Proxies > select Direct connection to the Internet > click on OK button.
    - Click on Edit again and then click on Preferences.
    - Under category, double-click on Advanced and then click on Proxies.
    - Select Direct connection to the Internet and click on OK button.
    - Click on OK button.
- Web page hangs, corrupt downloads, or nothing but junk characters is being displayed on the screen. What do I need to do?
  A:Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

- Why can't I connect to the Web Configuration?
  A:you can remove the proxy server settings in your web browser.
- Why does BR261c ’s setup page shut down unexpectedly?
  A:If one of the pages appears incompletely in BR261c ’s setup pages, please click on Logout item on the Main Menu before shutting it down. Don’t keep it working. Then, close Internet browser and open it again for going back to the previous page.

- I don’t know how to configure DHCP.
  A:DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via BR261c . Without DHCP, you would have to configure each computer separately. It’s very troublesome. Please Open Internet browser > Input 192.168.1.1 in the website blank field > Select DHCP Server under the IP Config Menu. For more information, please refer to Router Mode or AP Mode).

- How do I upgrade the firmware of BR261c ?
  A:Periodically, a new Flash Code is available for BR261c on your product supplier’s website. Ideally, you should update BR261c ’s Flash Code using Firmware Upgrade on the System Management menu of BR261c Settings.

- Why is that I can ping to outside hosts, but cannot access Internet websites?
  A:Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

- BR261c couldn’t save the setting after click on Apply button?
  A:BR261c will start to run after the setting finished applying, but the setting isn’t written into memory. Here we suggest if you want to make sure the setting would be written into memory, please reboot the device via Reboot under System Management directory.
- Why couldn’t my wireless notebook work on-line after checking?
  A:Generally, Wireless networks can sometimes be very complicated to set up, particularly if you're dealing with encryption and products from different vendors. Any number of variables can keep your workstations from talking to each other. Let's go over some of more common ones.

For starters, verify that your router and your workstation are using the same SSID descriptions. SSID acts as a password when a mobile device tries to connect to the wireless network. The SSID also differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A workstation will not be permitted to connect to the network unless it can provide this unique identifier. This is similar to the function of your network's Workgroup or Domain name.
When you're experiencing conductivity problems, it is always best to keep things simple. So next you are going to do is that, please disable any WEP encryption you might have configured.
Successful implementation of encryption also includes the use of a shared key. A HEX key is the most common, but other formats are also used. This key identifies the workstation to the router as a trusted member of this network. Different manufacturers can implement this key technology in ways that might prevent them from working correctly with another vendor's products. So pay attention to detail is going to be the key to a successful installation.
Next make sure the router and the NIC are configured to use the same communications channel. There are normally 11 of them, and the default channel can also vary from vendor to vendor. You might also want to confirm that the router has DHCP services enabled and an address pool configured. If not, the NIC won't be able to pick up an IP address. I have run across a few access points that offer DHCP services but do not assign all of the needed IP information to the NIC. As a result, I was able to connect to the network, but could not browse the web. The point is, don't assume anything. Verify for yourself that all of the required settings are being received by the workstation.
Finally, you might want to keep the system you're trying to configure in the same room as the router, at least during the initial configuration, in order to minimize potential interference from concrete walls or steel beams.

- My PC can’t locate the Wireless Access Point.
  A:Check the following:
  - Your PC is set to Infrastructure Mode. (Access Points are always in Infrastructure Mode.)
  - The SSID on your PC and the Wireless Access Point are the same. Remember that the SSID is case-sensitive. So, for example “Workgroup” does NOT match “workgroup”.
  - Both your PC and the Wireless Access Point must have the same setting for WEP. The default setting for the Wireless Router is disabled, so your wireless station should also have WEP disabled.
  - If WEP is enabled on the Wireless Router, your PC must have WEP enabled, and the key must match.
  - If the Wireless Router’s Wireless screen is set to Allow LAN access to selected Wireless Stations only, then each of your Wireless stations must have been selected, or access will be blocked.
  - To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Access Point. Remember that the connection range can be as little as 100 feet in poor environments.

- Wireless connection speed is very slow.

A: The wireless system will connect at highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with following:

- Access Point location: Try adjusting the location and orientation of the Access Point.
- Wireless Channel: If interference is the problem, changing to another channel may show a marked improvement.
- Radio Interference: Other devices may be causing interference. You can experiment by switching other devices off, and see if this helps. Any “noisy” devices should be shielded or relocated.
- RF Shielding: Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Access Point.

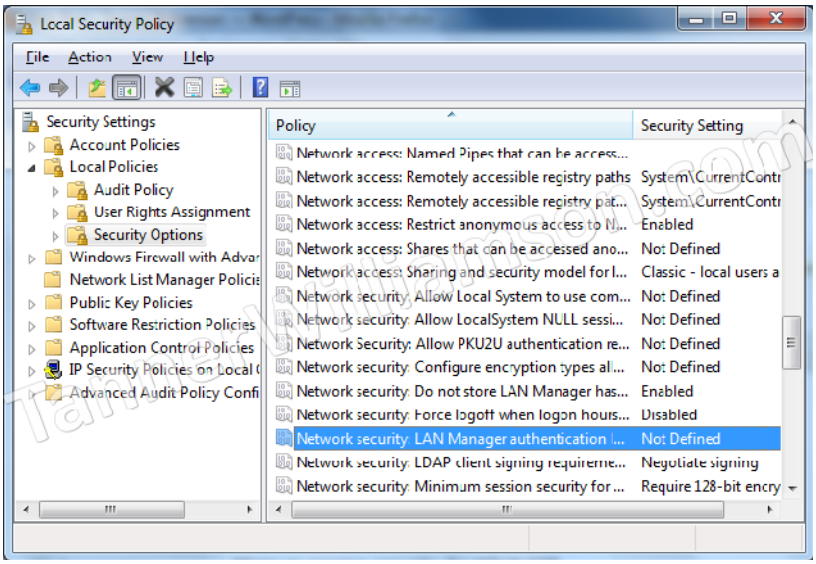
- Some applications do not run properly when using the Wireless Router.
  A:The Wireless Router processes the data passing through it, so it is not transparent. Use the Special Application feature to allow the use of Internet applications which do not function correctly. If this does solve the problem, you can use the DMZ function. This should work with almost every application, but:
  - It is a security risk, since the firewall is disabled.
  - Only one (1) PC can use this feature.

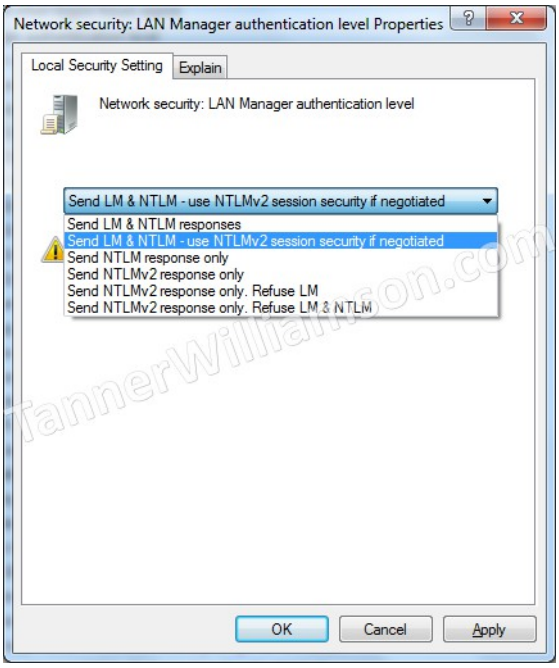
- I can’t connect to the Wireless Router to configure it.
  A:Check the following:
  - The Wireless Router is properly installed, LAN connections are OK, and it is powered ON.
  - Make sure that your PC and the Wireless Router are on the same network segment.
  - If your PC is set to “Obtain an IP Address automatically” (DHCP client), restart it.
  - If your PC uses a Fixed (Static) IP address, make sure that it is using an IP Address within the range 192.168.1.129 to 192.168.1.253 and thus compatible with the Wireless Router’s default IP Address of 192.168.1.254. Also, the Network Mask should be set to 255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using Control Panel ~ Network to check the Properties for the TCP/IP protocol.

- The WinXP wireless interface couldn’t communicate the WEP with SAPIDO BR261c’s wireless interface.
  A:The default WEP of WinXP is Authentication Open System - WEP, but the WEP of SAPIDO BR261c is only for Shared Key - WEP, it caused both sides couldn’t communicate. Please select the WEP of WinXP from Authentication Open System to Pre-shared Key - WEP, and then the WEP wireless interface between WinXP and SAPIDO BR261c would be communicated.

- Vista / WIN7 can not access USB disk if samba is "user mode"

a. Open Control Panel.
b. Choose Administrative Tools.
c. Click Local Security Policy.
d. Under Local Policies and Security Options , change Network security: LAN Manager Authentication Level from “Not Defined” to “Send LM & NTLM responses”





- What is the maximum number of IP addresses that the XDSL Router will support?
  A:The Router will support to 253 IP addresses with NAT mode.
- Is the Router cross-platform compatible?
  A:Any platform that supports Ethernet and TCP/IP is compatible with the Router.

- Why does the router dial out for PPPoE mode very often?
  A:Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these programs. Or you can set the idle time to 0, then control to dial out manually.
- What can I do if there is already a DHCP server in LAN?
  A:If there are two DHCP servers existing on the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.